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CHAPTER 1

THE CANADIAN FINANCIAL REPORTING ENVIRONMENT

ASSIGNMENT CLASSIFICATION TABLE

Topic		Brief Exercises	Writing Assignments
1.	Financial statements and financial reporting.		
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5.	Management bias in financial reporting.		1
6.	Importance of user needs in financial reporting.		1, 2, 7
7.	Need for accounting standards.	6, 7	1, 2, 7
8.	Parties involved in standard-setting.	8, 9, 10, 11, 12, 13, 14, 15	3, 6
9.	GAAP.	16, 17, 18	6,
10.	Professional judgement.	19, 20	6
11.	Ethical issues.	21, 22, 23	5
12.	Challenges facing financial accounting	20, 24, 25	5, 7
13.	Information Assymetry	4, 5	

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 1-1

Accounting has the responsibility of measuring company performance accurately and fairly on a timely basis. This enables investors and creditors to assess the relative risks and returns of investment opportunities and channel resources more effectively. If a company's financial performance is measured accurately, fairly, and on a timely basis, the right managers and companies are able to attract investment capital. Unreliable and irrelevant information leads to poor capital allocation, which adversely affects the securities market and ultimately the performance of the economy as a whole.

BRIEF EXERCISE 1-2

Some stakeholders using financial accounting information and financial statements include:

Investors – These stakeholders are interested in the performance of their investment in the company. They will use the financial statements to evaluate management stewardship and effectiveness.

Creditors – These stakeholders are interested in evaluating the company to decide whether to lend money to it. They will use the statements to evaluate the risk that will be taken in making the loan. For example, lenders want to know whether the company will be able to repay its loans when due and service interest and principal on a timely basis.

BRIEF EXERCISE 1-2 (CONTINUED)

Canada Revenue Agency (CRA) – These stakeholders establish the rules for how taxable income will be measured. They are interested in the fair measurement of the financial position and financial performance of the company so that the appropriate amount of tax will be paid. Note that in preparing the tax return, the financial statements net income is the starting point and is then adjusted to arrive at taxable income, which is used to calculate the amount of taxes payable. The CRA is principally interested in compliance with the Income Tax Act.

Financial Analysts – These stakeholders provide investment advice to their clients. They are interested in evaluating the investment opportunities and potential of various companies.

Note: This is only a suggested list of stakeholders and their possible uses of the financial accounting information. There are many other stakeholders as discussed in the chapter that would be acceptable answers to this question.

Different stakeholders make different decisions that require different information. For example, lenders want to know whether the company will be able to repay its loans but the Canada Revenue Agency (CRA) wants to know the amount of taxes that should be paid for the current year. Much of the information that the lenders would request, such as who are the company's major customers and the amounts they owe the company, would be of no interest to the CRA for income tax purposes yet may be of relevance in a GST/HST review.

BRIEF EXERCISE 1-3

The overall objective is to provide financial information that is useful to users (primarily capital providers such as investors and lenders) that is decision relevant (i.e., will help them make decisions about allocating capital). The statements should communicate information about:

- 1. the entity's economic resources and claims to those resources and**
- 2. changes in those resources and claims. (IASB/FASB jointly published Exposure Draft).**

Note the emphasis on resource (or capital) allocation decisions, which is a balance sheet focus. The assessment of management stewardship is also important since users need to know whether management is doing their job to maximize shareholder value (which is also called fiduciary duty). As a general rule, it is assumed that management stewardship is already taken into account in the resource allocation decision.

BRIEF EXERCISE 1-4

Information asymmetry exists when one stakeholder in the financial reporting process has more or different information than another. For example, management generally has more information about the company than external investors or creditors. While it is not practical nor optimal for perfect information symmetry to exist, financial reporting serves the role of ensuring that relevant information is properly communicated to external parties such as investors, and others.

BRIEF EXERCISE 1-5

There is a risk where information asymmetry exists, that the party with the additional information will act in their own self-interest to the detriment of the other party and/or the capital market in general. For instance, management might withhold negative information about the company for fear that it will hurt the manager's bonus. This would not be optimal for external parties such as creditors and investors who may

BRIEF EXERCISE 1-5 (Continued)

need that information before they invest or lend the company money. The risk that the party with the additional information may act in their own self-interest is known as moral hazard. If people understand that this behaviour is tolerated in the marketplace, the marketplace may attract people and companies that accept and tolerate this behaviour (known as adverse selection). This will degrade the capital marketplace as there will be less transparency and information sharing and thus suboptimal capital allocation.

BRIEF EXERCISE 1-6

A common set of standards applied by all businesses and entities provides financial statements which are reasonably comparable. Without a common set of standards, each enterprise could, and would, develop its own theory structure and set of practices, resulting in a lack of comparability among enterprises.

BRIEF EXERCISE 1-7

General-purpose financial statements are not likely to satisfy the specific needs of all interested parties. Since the needs of interested parties such as creditors, managers, owners, governmental agencies, and financial analysts vary considerably, it is unlikely that one set of financial statements would be equally appropriate for these varied uses. The level of detail in financial statements is based on specific requirements in accounting standards and management's perception of users' needs, balanced against the cost of providing this additional information.

BRIEF EXERCISE 1-8

Accounting was affected and changed between 1900 and 1930 by the growth of the corporate form of enterprise, the growing separation of management from ownership, the imposition of tax on business and individual income, and the stock market crash (attributed in part to lax accounting standards and oversight), and the subsequent great depression.

BRIEF EXERCISE 1-9

The International Accounting Standards Board (IASB) has in recent years become the dominant standard setting body in the world. By 2005, over 7,000 companies had adopted IFRS, with more than 100 countries now requiring or permitting the use of IFRSs, or in the process of converging with the International Accounting Standards Board's (IASB) standards, at present and in the near future this means that hundreds of thousands of companies throughout the world will use either the full IFRS or the version for small and medium size enterprises.

The goal of the IASB is to develop, in the public interest, a single set of high quality global accounting standards. See www.iasb.org for further details.

BRIEF EXERCISE 1-10

The Accounting Standards Board (AcSB) of the CICA has primary responsibility for setting GAAP in Canada. This is accomplished through a lengthy and complex process. Two basic premises underlie the process of establishing financial accounting standards: (1) the AcSB should respond to the needs and viewpoints of the entire economic community, not just the public accounting profession, and (2) it should operate in full public view through a “due process” system that gives interested persons enough opportunity to make their views known. The Accounting Standards Oversight Council (AcSOC)

BRIEF EXERCISE 1-10 (Continued)

oversees AcSB activities: its activities include setting the agenda and reporting to the public, among other things.

The AcSB is responsible for setting standards for non-publicly accountable private enterprises (ASPE), not-for-profit entities, and pension plans only. Standards for publicly accountable entities are set by the International Accounting Standards Board. It is important to note that non-publicly accountable entities will also have the option to use IFRS.

BRIEF EXERCISE 1-11

The Provincial Securities Commissions (including the Ontario Securities Commission) collectively are one of the stakeholders in standard-setting. Standard-setting is the responsibility of the Accounting Standards Board (AcSB) (for ASPE) and the International Accounting Standards Board (for IFRS). The Accounting Standards Oversight Council (AcSOC) sets the strategic direction and priorities of the AcSB. AcSOC membership consists of regulators and representatives of the financial analyst communities, amongst others.

The OSC issues its own disclosure requirements. These additional requirements are applicable only to companies registered with the OSC.

BRIEF EXERCISE 1-12

One of the functions of the Ontario Securities Commission (OSC) and the Securities and Exchange Commission (SEC) is to represent and protect the interests of investors. They do not represent the interests of different users of financial information. The CICA has since the early 1970s had the sole legislative and regulatory authority to set national private sector accounting standards in Canada. It delegates this to the AcSB. Starting in 2011, the AcSB is responsible for ASPE and the IASB has is

BRIEF EXERCISE 1-12 (Continued)

responsible for IFRS. This ensures that accounting standards have a high degree of acceptance from its broad community of constituents.

BRIEF EXERCISE 1-13

The sources of pressure are innumerable, but the most intense and continuous pressure to change or influence accounting principles or standards comes from individual companies, industry associations, governmental agencies, securities commissions, practicing accountants, academicians, professional accounting organizations, and public opinion. As we move towards international harmonization, the U.S. accounting standards will have a continuing influence on IFRS due to the significant capital pool and flows associated with U.S. markets.

BRIEF EXERCISE 1-14

"Economic consequences" means the impact of accounting reports on the wealth positions of issuers and users of financial information and the decision-making behaviour resulting from that impact. In other words, accounting information impacts various users in many different ways, which leads to wealth transfers among these various groups.

If politics plays too much of a role in the development of accounting standards, standards could become subject to manipulation for the purpose of furthering whatever policy prevails at the moment. No matter how well intentioned the standard setters may be, if information is designed to indicate that investing in a particular enterprise or industry involves less risk than it actually does, or is designed to encourage investment in a particular segment of the economy, financial reporting will suffer an irreplaceable loss of credibility.

BRIEF EXERCISE 1-15

The users of financial information from public companies have different needs than the users of financial information from private companies. Public corporations need the opportunity to present financial information using consistent accounting rules as those used globally. To accomplish this, public companies need to follow the International Financial Reporting Standards (IFRS). Doing so helps Canadian companies compete in a global market. Following this set of policies and standards is not essential to privately owned businesses who may have less complex business models and/or fewer number of financial statement users who do not expect as extensive measurement and disclosure requirements as those required under IFRS.

BRIEF EXERCISE 1-16

No one particular proposal is expected in answer to this question. The students' proposals, however, should be defensible relative to the following criteria:

- 1. The method must be efficient, responsive, and expeditious.**
- 2. The method must be free of bias and be above or insulated from pressure groups.**
- 3. The method must have legislative authority or otherwise command widespread support.**
- 4. The method must produce sound yet practicable accounting principles or standards.**

The students' proposals might take the form of alterations of the existing methodology, an accounting court, or governmental device.

BRIEF EXERCISE 1-17

The explanation should note that generally accepted accounting principles have “substantial authoritative support.” They consist of accounting practices, procedures, theories, and broad principles and conventions of general application, including underlying concepts and methods, which are recognized by a large majority of practicing accountants as well as other members of the business and financial community. GAAP is divided into primary and other sources. Primary sources must be looked to first for how to treat an issue. Where primary sources do not deal with the issue, the accounting policy selected must be consistent with the primary sources as well as developed through use of professional judgement in accordance with the conceptual framework.

BRIEF EXERCISE 1-18

For public companies, GAAP incorporates IFRS, IAS, and Interpretations. For private companies, pension plans, and not-for-profit entities primary sources of GAAP include (in descending order of authority) the Accounting Handbook sections 1400 to 3870, Accounting Guidelines, background information and illustrative material related to the previous items and implementation guides.

An entity should apply every primary source of GAAP that deals with the accounting and reporting of transactions encountered by an entity. This means that primary sources must be looked to first.

Where primary sources do not deal with a specific issue, the entity should then adopt accounting policies that are consistent with the primary sources as well as the Conceptual Framework.

BRIEF EXERCISE 1-19

The chairman of the FASB was indicating that too much attention is put on the bottom line and not enough on the development of quality products. Managers should be less concerned with short-term results and be more concerned with the long-term results. In addition, short-term tax benefits often lead to long-term problems.

The second part of his comment relates to accountants being overly concerned with following a set of rules, so that if litigation ensues, they will be able to argue that they followed the rules exactly. The problem with this approach is that accountants often seem to want more and more rules with less reliance on professional judgment. Less professional judgement leads to inappropriate use of accounting procedures in difficult situations.

In the accountants' defense, recent legal decisions have imposed vast new liability on accountants. The concept of accountant's liability that has emerged in these cases is broad and expansive; the number of classes of people to whom the accountant is held responsible are almost limitless.

BRIEF EXERCISE 1-20

Principles-based standards are considered to be based on a conceptual framework and the accounting principles that result may require significant professional judgement in interpreting and applying the standards to ensure compliance. Rules-based standards are generally quite detailed, and in many instances follow a "check-box" mentality that some contend may shield accountants, auditors and companies from legal liability. IFRS and ASPE tend to follow the principles-based standard-setting system, while U.S. GAAP is generally considered more rules-based (even though it is based on principles). This is because it is more prescriptive and detail-oriented.

BRIEF EXERCISE 1-21

Concern exists about fraudulent financial reporting because it can undermine the entire financial reporting process. Failure to provide information to users that is accurate can lead to inappropriate allocations of resources in our economy. In addition, failure to detect massive fraud can lead to additional governmental oversight of the accounting profession and financial reporting more generally.

Even though GAAP (including IFRS and ASPE) provides structured information that is relevant and represents underlying business transactions and events, it may be manipulated. This is because the various stakeholders in the process often act in their own self-interest. For instance, management may seek to optimize their own bonus or the value of their stock options.

BRIEF EXERCISE 1-22

Some of the reasons for difference include:

- 1. The objectives of financial reporting often differ among countries.**
- 2. The institutional structures are often not comparable.**
- 3. Strong nationalist tendencies may be pervasive and therefore there is reluctance to adopt any one country's approach.**

BRIEF EXERCISE 1-23

Accountants must perceive the moral dimensions of some situations because GAAP does not define or cover all specific features that are to be reported in financial statements. In these instances accountants must choose among alternatives. These accounting choices influence whether particular stakeholders may be harmed or benefited. Ethical decision-making involves awareness of potential harm or benefit and taking responsibility for the choices which should always consider the public interest.

BRIEF EXERCISE 1-24

Some major challenges facing the accounting profession relate to the following items:

Credibility – how to regain public confidence in the aftermath of corporate fraud and poor reporting practices.

Globalization of companies and capital markets – Canadian companies are operating and trading securities in global markets and are subject to accounting regulations in other jurisdictions. Canadian investors are investing in the global marketplace.

Non-financial measurement – how to report significant key performance indicators such as customer satisfaction indexes, backlog information and reject rates on goods purchased.

Soft assets – how to report on intangible assets, such as market know-how, intellectual capital, market dominance, and well-trained employees.

Timeliness – how to report more reliable real-time information in the Internet age.

BRIEF EXERCISE 1-25

The following are some of the key provisions of the Sarbanes-Oxley Act (SOX), enacted in 2002:

- Establishes an oversight board for accounting practices. The Public Company Accounting Oversight Board (PCAOB) has oversight and enforcement authority and establishes auditing, quality control, and independence standards and rules for Auditors.
- Implements stronger independence rules for auditors. Audit partners, for example, are required to rotate every five years and auditors are prohibited from offering certain types of consulting services to corporate clients.

BRIEF EXERCISE 1-25 (Continued)

- **Requires CEOs and CFOs to personally certify that financial statements and disclosures are accurate and complete and requires CEOs and CFOs to forfeit bonuses and profit sharing when there is an accounting restatement.**
- **Company management must report on the effectiveness of the financial reporting internal control system and the auditors must assess and report on these internal controls.**
- **Requires audit committees of Boards of Directors to be comprised of independent members and members with financial expertise.**
- **Companies must disclose whether they have a code of ethics for their senior financial officers.**

In Canada, many of the SOX requirements have now been put in place, or are soon to be put in place, in part by pronouncements by Canadian securities administrators such as the OSC

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text. Note that the first few chapters of the text lay the foundation for financial reporting decision-making. Therefore the cases in the first few chapters (1–5) are shorter with less depth. As such, they may not cover all aspects of a full-blown case analysis.

CA 1-1 POPOVICH

Overview:

- Reported net income a key focus for management – represents a reporting bias.
- Controller (Paula) is concerned about doing the right thing – not just doing what is required under GAAP.

Analysis and Recommendation:

- GAAP constrained companies must adopt new standards as prescribed in the CICA Handbook (publicly accountable entities follow IFRS which is included as Part I to the CICA Handbook and private entities follow ASPE which is Part II to the CICA Handbook). Normally the standard setters give companies some lead time so that they may ensure that they have all the appropriate information needed to present the information.
- Thus – they are not required to change to a new standard until GAAP requires it (the date is written into each standard).
- The issue is whether to adopt a change earlier even though not required or later when required.

Adopt new standard as required	Adopt new standard earlier than required
- GAAP requirements are met. - Need additional time to ensure that the company has all the information needed to prepare the financial statements under the new standard i.e. to ensure reliable. - Other.	- Provides greater comparability between years earlier if adopted earlier. - If this is the better presentation, why not share it with users as soon as possible. - Consideration of the impact on net income should not be a motivator for making the financial reporting decision (unbiased). - Other.

CA 1-1 POPOVICH (CONTINUED)

- In conclusion, earlier adoption of the standard is always encouraged and should be attempted where the costs of doing so do not exceed the benefits.

CA 1-2 BOSTON CLOTHING LIMITED

Overview

- When the company went public, IFRS became a legal constraint.
- The company was in the retail sales business and was struggling to maintain financial solvency. It had hired new management to turn the company around – they may have had an interest in showing the company in a better light than in reality. When it went public, the company appeared as though it had turned a corner (presumably thanks to the new management team). Thus the shares sold at \$15 per share. Note that the selling price would consider sustainable earnings.
- Subsequently, after going public, the company could not sustain its earnings and the share price dropped. Many shareholders lost their investments.
- Stakeholders included:
 1. The investors and potential investors who relied on the financial statements in deciding whether to invest or not. They would have been influenced by the net income as well as cash from operations as presented in the notes to the financial statements.
 2. The management and prior owners of the company – since the company was private, the prior owners – stood to gain because of the higher share price at the time they took the company public. They would not have been affected by subsequent stock price declines once they had sold their share of the business.
 3. The auditors – the auditors signed off on the statements that the investors would have relied on in making their decisions. They would have provided assurance that the financial statements presented fairly the results of operations. Subsequently, investors would be able to sue the auditors successfully if they could prove that the information was misleading.
 4. Other—creditors, customers, etc.

N.B. Since there are no financial reporting issues (i.e. dealing with recognition, measurement, presentation or disclosure) the analysis and recommendations section of this solution is not presented.

CA 1-3 GRAND LIMITED

The impact of a negative rating on Grand is that the company may have a more difficult time borrowing funds and will have to pay a higher rate of interest on such funds if obtained. The rating reflects the perceived financial strength of the company and the lower rating means that the company's fiscal responsibility may be in question. This may affect the company's long-term outlook and ability to carry out long-term contracts requiring long-term financing.

The fact that Grand's bonds now have the status of "junk bonds" means that the number of institutional investors interested in Grand will be much lower since their rating has fallen below the level acceptable for many pensions and mutual funds. "Junk bonds" are considered speculative investments and are attractive only to those investors seeking higher returns and who are willing to take on the increased default risk associated with bonds in this category.

Are the credit rating agencies stakeholders? Yes – they rate companies in terms of credit risk and therefore their customers rely on them for accurate and well researched credit ratings. They would not necessarily give a credit rating lightly without doing the proper research. If they are wrong, their own business and reputation will suffer. Knowing that a credit rating agency will be rating their debt, Grand would be biased to make sure that they obtain the best rating possible. Since the financial statements will be used by the rating agency to rate the company, there is a risk that the financial statements might paint the company in a more favourable light.

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TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 1-1 (Time 15-20 minutes)

Purpose—to provide the student with an opportunity to evaluate the viewpoint of removing mandatory accounting standards and allowing each company to voluntarily disclose the information it desired.

WA 1-2 (Time 30-40 minutes)

Purpose—to provide the student with an opportunity to discuss the pros and cons of the politicization of standard-setting, the impact accounting has on the environment, and the environment's influence on accounting.

WA 1-3 (Time 15-20 minutes)

Purpose—to provide the student with an opportunity to focus on the type of standard-setting environment exists in Canada. In addition, this case explores why user groups are interested in the nature of financial reporting standards and why some groups wish to issue their own standards.

WA 1-4 (Time 15-25 minutes)

Purpose—to provide the student with an opportunity to discuss the pros and cons of a continuous reporting model.

WA 1-5 (Time 15-20 minutes)

Purpose—to provide the student with an opportunity to discuss the Nortel company failures and the role of their auditors in issuing clean audit opinions.

WA 1-6 (Time 20-30 minutes)

Purpose—to provide the student with an opportunity to discuss the steps taken to increase government regulation in the capital marketplace as a result of the recent corporate failures. The student must also discuss the strengths and weaknesses of government regulation.

TIME AND PURPOSE OF WRITING ASSIGNMENTS (CONTINUED)

WA 1-8 (Time 30-35 minutes)

Purpose – to provide the student with an opportunity to discuss the reasons why Canada decided to adopt a two-tiered system – one for private companies and one for public companies. The student must also discuss the pros and cons of this type of system.

WA 1-9 (Time 15-20 minutes)

Purpose – to provide the student with an opportunity to consider how management may be bias in terms of the information they share with the public, and how the asymmetry of information may impact users decisions.

WA 1-10 (Time 15-20 minutes)

Purpose – to provide the student with an opportunity to consider the ethical dilemma of judgemental decisions with financial reporting and evaluate the potential consequences of those decisions.

WA 1-11 (Time 5-10 minutes)

Purpose – to provide the student with an opportunity to consider the integrated reporting initiative and the impact it would have on various users of financial statements.

WA 1-12 (Time 15-20 minutes)

Purpose – to provide the student with an opportunity to investigate and compare the funding for AcSB/FASB and comment on the funding principals of each. Students are asked to comment on what impact the principals have and the potential issues if they did not exist.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 1-1

It is not appropriate to abandon mandatory accounting standards and allow each company to voluntarily disclose the type of information it considers important. Without a coherent body of accounting theory and standards, each accountant or enterprise would have to develop its own theory structure and set of practices, and readers of financial statements would have to familiarize themselves with every company's own accounting and reporting practices. As a result, it would be almost impossible to prepare statements that could be compared and there would be a tremendous waste of resources in both preparation and in analysis

Further, GAAP has been set by standard setters to help with the preparation of financial statements and to help reduce management bias. A single set of general-purpose financial statements is prepared to meet the majority of users' needs.

In addition, voluntary disclosure may not be an efficient way of disseminating information. Some companies will be likely to disclose less information if given the discretion. Thus, companies can reduce the cost of assembling and disseminating information. However, an investor wishing additional information has to pay to receive the desired additional information. Different investors may be interested in different types of information. Since the company may not be equipped to provide the requested information, it would have to spend additional resources to fulfill such needs; or the company may refuse to supply such information if it is too costly to do so. As a result, investors may not get the desired information or they may have to pay a significant amount of money for it. Furthermore, redundancy in gathering and distributing information occurs when different investors ask for the same information at different points of time. To the society as a whole, this would not be an efficient way of utilizing resources.

Note that a contrary argument to companies providing less disclosure is set out in the "competitive disclosure hypothesis" which suggests that companies in competition for scarce capital resources will actively increase their disclosure to reduce their perceived risk and therefore reduce their cost of capital and increase their access to investors.

WA 1-2

(a) Arguments for politicization of the accounting rule-making process:

1. Accounting standards and financial reporting depend in large part on public confidence for its success. Consequently, the critical issues are not solely technical, so all those having a bona fide interest in the output of accounting should have some influence on that output. In fact, all stakeholders can comment on proposed changes and new standards through the "due process" that standard setting entails.
2. There are numerous conflicts between various interest groups. In the face of this, compromise is necessary, particularly since many of the critical issues in accounting are value judgements, not the type that can be solved, as we have traditionally assumed, using deterministic models. Only in this way (reasonable compromise) will the financial community have confidence in the fairness and objectivity of the accounting standard setting process.
3. Over the years, accountants have been unable to establish, on the basis of technical accounting elements, rules which would bring about the desired uniformity and acceptability. This inability itself indicates that standard-setting is primarily consensual in nature.
4. Since the economic well-being of businesses and individuals is influenced to a substantial degree by accounting standards, it is only natural that they should try to influence or control the factors that determine this. Businesses and individuals would also want to ensure that accounting standards reflect the realities of financial activity in their particular industry.

(b) Arguments against the politicization of the accounting rule-making process:

1. Many accountants feel that accounting is primarily technical in nature. Consequently, they feel that substantive, basic research by objective, independent, and fair-minded researchers ultimately will result in the best solutions to critical issues, such as the concepts of income and capital, even if it is accepted that there isn't necessarily a single "right" solution for most accounting issues.
2. Even if it is accepted that there are no "absolute truths" as far as critical issues are concerned, many feel that professional accountants—because of their independence, education, training, and objectivity—are in the best position to decide what generally accepted accounting principles should be, especially if one takes into account the diverse interests of the various groups using accounting information.
3. The complex situations that arise in the business world require that trained accountants develop the appropriate accounting principles.
4. The use of consensus to develop accounting principles would decrease the professional status of the accountant.
5. This approach would lead to "lobbying" by various parties to influence the establishment of accounting principles.

WA 1-3

- (a) Model 2 is used in Canada—the private, professional approach. The *CICA Handbook* is the sole responsibility of the AcSB.. The membership of the AcSB is primarily made up of professional accountants. The self-regulating nature of the profession stems from tradition in general, and from the fact that the Canada Business Corporations Act has conferred legal authority on the provisions of the *CICA Handbook*. (Note to Instructor: the public/private model applies in the United States.)
- (b) Publicly reported accounting numbers influence the distribution of scarce resources. Resources are channelled where needed at returns commensurate with perceived risk. Thus, reported accounting numbers have economic effects in that resources are transferred among entities and individuals as a consequence of these numbers. It is not surprising then that individuals affected by these numbers will be extremely interested in any proposed changes in the financial reporting environment.
- (c) Some possible reasons why other groups might wish to establish standards are:
 - 1. As indicated in the previous answer, standards have economic effects and therefore certain groups would prefer to make their own standards to ensure that they receive just treatment.
 - 2. Some believe the AcSB does not act quickly to resolve accounting matters, either because it is not that interested in the subject area or because it lacks the resources to do so.
 - 3. Some argue that the AcSB should not set standards in certain areas, for example, provincial, federal and municipal governments, because the problems are unique and not well-known by the AcSB.

The Ontario Securities Commission issues its own disclosure requirements in addition to those required by IFRS for publicly traded companies. The OSC reviews and monitors financial statements of publicly traded companies to determine whether the statements present fairly the financial position and results of operations of the companies.

WA 1-4

The advantages of a continuous reporting model are that users have access to information on a more timely basis. This in turn makes the information more relevant to their needs. The use of the internet to disseminate the information also allows the company to provide this information at a lower cost and to access a larger group of users. The use of technology also means that the companies can provide additional disclosure of information that traditionally was not available to small investors (for example, interviews with senior management, briefings with analysts, etc.).

The disadvantages of a continuous reporting model reflect the issue of the quality of the information. More timely information does not necessarily imply more accurate information. As has been demonstrated with interim reporting, when the time frame of the information is shortened, additional estimates have to be made. This can lead to additional confusion for users if information has to be subsequently modified or reclassified. An additional issue for the quality of the information is oversight of the information provided. Current annual financial reports are audited and annual and interim reports are reviewed by securities commissions. The same review standards do not exist for continuous reporting. If these standards were required, this would significantly increase the cost of providing the information.

The recent corporate failures, recent downturn in the technology-based industry and issues such as corporate stock option plans have illustrated that investor confidence is key to the capital marketplace. The importance of audited, reliable information to users is critical to investor confidence and reiterates the need for periodic audited information.

WA 1-5

Auditors are responsible to provide their opinion as to the fairness of the financial information presented in the companies' financial statements. This opinion is based to a large extent on whether the companies have followed GAAP. One of the main issues raised with respect to the Nortel misstatements is over accounting standards.

GAAP (IFRS and ASPE) is principles-based and requires significant judgement. On the positive side, this allows GAAP to be flexible however on the negative side, financial statement preparers may act in their own self-interest and provide biased information. Where incentive systems such as bonuses and stock option plans exist, this may be a big problem.

A second factor may be the relationship between the company and the auditors.

The company may hide information or mislead the auditors. This is a big audit risk and although auditors design the audit to ensure that the statement are not materially misstated, it is not possible for the auditors to audit every single document and transaction.

WA 1-6

- (a) In the U.S. the Sarbanes-Oxley Act enacted by Congress aims at improving the accuracy and reliability of corporate disclosures by requiring chief executive and financial officers to certify quarterly and annual reports. Its provisions include new rules for auditors, conflicts of interest guidelines and review of the efficacy of the rules-based system of public accounting in the US.

In Canada, the Canadian Public Accountability Board (CPAB) was established to develop, codify and implement auditing, quality control, and independence standards and rules. Stronger independence rules now exist for auditors, for example there must be a rotation of auditors every 5 years. If there is an accounting restatement, CEO's and CFO's must forfeit bonuses and profit sharing. The effectiveness of the financial reporting internal control systems must be reported by management and auditors must assess and report on these internal controls. Audit committees must be made up of independent members and members with financial expertise. Companies must disclose whether there are codes of ethics with respect to their senior financial officers.

- (b) Other options include tighter accounting standards and new regulatory measures intended to strengthen the independence and improve the accountability of external auditors.

The profession is also pushing regulators to promulgate tougher disclosure standards for management discussion and analysis reports.

The Ontario Securities Commission has developed new securities regulations in response to tougher US auditor rules. Echoing some of the key provisions in Sarbanes-Oxley, the new rules call for five-year engagement partner rotations, a prohibition on financial ties between audit team members and client firms, as well as strict limits on how firms perform nonassurance services for audit clients and what services may be provided. This is echoed by the profession's standard for auditor independence. Those rules speak directly to the sorts of non-arm's length relationships that dramatically undermined Arthur Andersen's ability to provide investors with an objective analysis of Enron's murky financial condition.

WA 1-6 (CONTINUED)

- (c) The strengths of government regulation include an independent verification on the financial reporting process and provide assurance and increased investor confidence that financial reporting is monitored. Government regulation however, interferes with the free market economy and the self-regulating nature of financial reporting. It will also lead to higher costs and does not necessarily imply a fully independent verification since government objectives do not always mesh with those of the economy. This could in turn lead to more politicization of the standard-setting process. Geographically-bound governments also do not address the issue of huge multi-national companies. Additional government regulation does not guarantee that another Enron-type situation will not reoccur. If corporate managers are determined to misrepresent results and commit fraud, additional government regulations will likely not prevent this from happening.

Developed from the article "After Enron", by John Lorinc, CA Magazine, December 2002.

WA 1-7

For many years there has been a discussion of whether or not one single set of standards could really meet all the needs of businesses and users. Finally, after years of debate, the AcSB has decided that it is best to have two sets of standards – one for publicly accountable enterprises (PAE's) and one for non-publicly accountable enterprise (non-PAE'S).

The arguments for having a two-tiered system are as follows: (adapted from: "Private Matters", by Jeff Buckstein, CA Magazine, May 2009)

1. The users of non-PAE's financial statements are primarily the owner/managers, the bank and the tax authorities. A large set of users for PAE's financial statements are external users – potential investors. The needs of these users are very different. A two-tiered system allows the standards to be developed with specific user groups in mind.
2. PAEs that are usually involved in global businesses and will be following global accounting standards. Since most private companies do not do business globally, there is no need for global standards to be used. A made-in Canada solution is better.
3. Historically, GAAP has allowed differential reporting which allowed private companies to follow more simplified standards if the shareholders unanimously agreed. These options have now been incorporated into the ASPE.
4. Some of the standards are not relevant for private companies and these can be eliminated. Sections pertaining to earnings per share and interim reporting, for example are often not relevant for private companies where the company's shares are closely held.
5. Private companies are usually not involved in complex transactions that require complex accounting standards. In these cases, sections can be simplified to meet the needs specifically for private companies (or example, financial instruments and income taxes). The complexity and disclosure requirements of these sections that is required for PAE's are not relevant for private companies.
6. Disclosure requirements are significant for PAE's given that market analysts want a lot of information. But for private companies, the main users are the bank and leasing companies who do not need a lot of this information. Disclosure is costly to prepare. Therefore, with ASPE, the amount of disclosure can be greatly reduced reducing the cost of preparing financial statements.
7. The corporate structure of non-PAE's is also more simple, usually only consisting of one company, or maybe a few. So the complexities of standards related to consolidations are not really required. More simple accounting treatments can be adopted for private companies.

WA 1-7 (Continued)

8. In many areas of the standards, there will be few changes, so IFRS and ASPE will have many similarities.

Arguments against a two –tiered system:

1. Over time, there is a risk that the two systems will really diverge and become very different. This will make it difficult for professionals to learn and know two sets of accounting standards.
2. It is costly to have two sets of GAAP that must be maintained and updated regularly by the standard setting boards.
3. CFOs working in private companies may not be able to move easily to public companies, since they will not be familiar with the reporting and disclosure requirements.
4. For professionals preparing financial statements – it may also be difficult to move from private companies to public companies.
5. What about large private companies that operate similarly to a PAE? Are their needs really different? Many would argue that the needs and reporting requirements are the same. So at what point does a non-PAE move from ASPE to IFRS?
6. It might be difficult for a private company to go public or raise capital from other sources given that their historical financial statements will be prepared on a more simplified basis.

WA 1-8

The following groups would be stakeholders in the performance of the public company:

- 1) Investors. Since the company is public and issues shares, the current and potential future investors would have significant interest in the reported financial information. Current investors would be interested in the profitability and any losses incurred by the company to determine whether their investment is secure and if they are receiving a reasonable return. Potential future investors would look to the financial stability of the company as well as future plans and prospects that might indicate a good investment for their capital.
- 2) Creditors. Often a public company will have debt financing. The creditors may be banks or individuals, and their interest in the financial statements will be the performance of the company and its ability to repay any loans that have been issued. Creditors may look to the liquidity of the balance sheet or the adherence to covenants to gauge the status of their funds.
- 3) Management and employees. The management and employees of the company will be interested in the financial results as this may impact their job stability or compensation in the following year.
- 4) Auditors. The auditors of the company are interested in the financial statements as the fair and accurate presentation of financial information is reflective of their work as auditors. Any errors or omissions in the financial statements would reflect poorly on the auditors and have a major impact on their reputation.
- 5) Customers. The buyers of oil in the United States would be interested in the financial statements as this information may indicate any changes in the company's ability to drill and supply oil.
- 6) Public. As the environmental impact of the oil industry has become a mainstream topic of debate in recent years, there are likely other groups concerned with the financial reporting of the oil company as these reports might indicate initiatives that have been taken by the company to reduce their impact on the environment, or any potential liabilities that have resulted from environmental damage including lawsuits or clean-up costs.

WA 1-8 (Continued)

What is at stake for the stakeholders in the financial reporting process can be very different and the ability of financial statements to give these users the information they need is a prime concern of standard setting.

WA 1-9

A new product may lead to higher sales and better performance for the company. Management may want to provide this information to the public to encourage investors to invest capital with their company. They may also want consumers to be aware of the new product so that they may create publicity and excitement for the release.

Management may want to keep the information confidential to prevent competitors from attempting to copy the product or reach the market first with a new product of their own. There are costs associated with information sharing whether it be purchasing advertising space, paying the salary of public relations professionals or the cost of management time in making decisions about how to share information. In some cases these costs may not be justifiable if the information is not considered important to the organization.

The asymmetry of information in this scenario would impact the actions of competitors and customers. In an efficient market these parties would have access to all of the information and be able to make well-informed decisions.

WA 1-10

- a) Management may want to wait for confirmation that the product is the cause of the injuries for several reasons. Firstly, the costs of issuing a recall may be significant and the negative publicity may have an impact on the reputation of the company and reduce future sales. Another reason for waiting would be that management may not want to damage their personal reputation or risk losing out on a bonus or promotion by admitting to the failed product.

WA 1-10 (Continued)

- b) While the expectation is that negative publicity will result from admitting to a faulty product, there is the potential that customers will see the communication as a sign of integrity and it may improve their long-term trust in the brand. As well, recalling the product may help prevent future injuries and potential lawsuits.
- c) From an ethical standpoint the best course of action would be to communicate to the public the potential safety hazard related to the product and recall the toy. While the profitability of a company is important, when it comes to potential harm to users a company should prioritize the safety of their customers. As the advisor to ABC Inc. a recall and further research into the potential malfunction is recommended.

WA 1-11

Institutional investors are those investors who are willing to devote time and resources to ensuring they make the best investments, and they do this by obtaining a good deal of information about the companies they invest in. A typical institutional investor may be a company similar to a pension or a mutual fund. Integrated financial reporting takes into consideration non-financial performance measures including environmental and governance indicators. The greater variety of information that would be required with integrated reporting would suit the institutional investor's needs as a user of the statements. The benefit to this type of investor is not only the added variety in information provided, but also enables them to develop a deeper understanding of the business operations in the current period, and where the company is likely headed based on their business model and practices.

WA 1-12

- a) The first principle stating that funding should be broad-based indicates that IASB funding should be from many sources so that IASB does not need to rely on one source. The reason for this is if a single group or person provided significant funding to the IASB that group would have undue influence. There is potential for the group to convince standard setters to make changes in their favour in order to maintain the funding the IASB needs to operate.

The second principle that funding be compelling is to promote funding of some level from all those who will benefit from the centralized standard setting of the IASB. As the IASB has 16 members using its standards this principle would be that all members should contribute for the use of the standards. All parties contributing can reduce the risk that one party would have influence in politicizing the standards by being one of few contributors.

The principle that requires open-ended funding indicates that the funding parties should not be guaranteed any particular results. This reduces the potential politicization of the IASB receiving funding by parties for the sole purpose of fulfilling those parties' goals.

The fourth principle for the IASB is that funding be country-specific, meaning that participating countries that use the standards set by the IASB should provide funding proportionately. This would encourage funding from all parties and increased funding from all of the larger countries should prevent a single country from having higher influence than any other. This also ensures a sufficient level of funding can exist for the IASB to operate.

- b) Without the 4 principles discussed above there is a high likelihood of standard setting being influenced by individual groups to achieve more favourable standards for their particular type of organization. This would impact the ability of IASB to develop standards that are fair and consistent so that financial information can be presented appropriately.
- c) Since the AcSB and FASB are national organizations, the country-specific principles would not apply. Each organization is focused on setting standards for their own country (Canada and the United States)

RESEARCH AND FINANCIAL ANALYSIS

RA 1-1 IASB EXPOSURE DRAFT

- a) The IASB suggests two general questions for users to provide comments on the exposure draft proposed amendments. The first questions whether the readers agree with the proposal or what alternatives they would recommend, while the second question asks whether the transitional provisions and effective date are considered appropriate. The purpose of the exposure draft is to allow the Board of the IASB to gather user comments on changes to the IFRS standards before the changes are enacted. This allows the users of financial statements in Canada to have input into the standard setting process. This in turn adds value to the IFRS standards as they are more closely meeting users' needs.
- b) The first amendment proposed relates to the disclosure of operating segments and would require additional disclosure of the factors an entity uses to identify operating segments. The next amendment would require a reconciliation of total reportable segments' assets to total entity assets if the information is provided regularly to chief decision makers.
- c) Both of the proposed amendments clarify the type of information that must be disclosed relating to operating segments. This makes the IFRS standard simpler to apply as the requirements are clearer. Without the changes above it is possible that the same disclosure would be provided if those applying IFRS interpreted the standards to require the same disclosure. The amendments clarify what is provided in the standards and helps improve consistency in the use of IFRS. Without the changes entities using IFRS 8 would likely look to other companies and previous experience to determine the correct disclosure. This is representative of the workings of the GAAP hierarchy. The CICA Handbook standard would first be applied, and afterward users may look to exposure drafts, IASB publications, or the common practice of other companies to determine what is generally accepted.

RA 1-2 IASB

- (a) The International Accounting Standards Board (IASB) is the professional standard setting body tasked with establishing a single set of global accounting standards.

It is committed to developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in financial statements. In addition, the Board cooperates with national accounting standard setters to achieve convergence in national accounting standards and International Financial Reporting Standards.

The board is responsible for the technical agenda and the development and approval of International Financial Reporting Standards (IFRS) and began full-time operations on April 1, 2001, further to the work of the International Accounting Standards Committee (IASC), established in 1973. Its parent, the IFRS Foundation is governed by trustees who are responsible for raising funds for the IASB, exercising oversight of the IASB and appointing members of the IASB.

- (b) In summary, the following groups might gain most from harmonization of financial reporting:
- Investors, investment analysts and stockbrokers: to facilitate international comparisons for investment decisions.
 - Credit grantors: for similar reasons to bullet point above.
 - Multinational companies: as preparers, investors, appraisers of products or staff, and as movers of staff around the globe; also, as raisers of finance on international markets (this also applies to some companies that are not multinationals).

RA 1-2 IASB (CONTINUED)

- Governments: as tax collectors and hosts of multinationals; also interested are securities markets regulators and governmental and nongovernmental rule makers.
- (c) The fundamental argument against harmonization is that, to the extent that international differences in accounting practices result from underlying economic, legal, social, and other environmental factors, harmonization may not be justified. Different accounting standards have evolved to serve the different needs of different users. This might suggest that the existing accounting is "correct" for a given nation and should not be changed merely to simplify the work of multinational companies or auditors. There does seem to be strength in this point particularly for smaller companies with no significant multinational activities or connections. To foist upon a small private family company in Luxembourg lavish disclosure requirements and the need to report a "true and fair" view in accordance with IFRS may be an expensive and unnecessary piece of harmonization.

The most obvious obstacles to harmonization are the sheer number and deep-rootedness of the differences in accounting. These differences have evolved over the previous century because of differences in users, legal systems, and so on. Thus, the differences are structural rather than cosmetic, and require revolutionary action to remove them.

Another facet of this is that professional accounting bodies are strong in certain countries such as Canada, the U.S. and the U.K., but weak in other countries such as Italy, Japan, and Switzerland. This means that it is difficult for professional bodies directly to achieve international harmonization throughout the developed western world. Thus, although the professional bodies may be able to make some progress, government intervention would be necessary for a wider harmonization. This brings us to a consideration of the obstacle of nationalism, which may show itself in an unwillingness to accept compromises that involve changing accounting practices towards those of other countries. This unwillingness may be on the part of accountants and companies, or on the part of states, which may not wish to lose their sovereignty. Another manifestation of nationalism may be the lack of knowledge of or interest in accounting elsewhere. A rather more subtle and acceptable variety of this, is the concern that it would be difficult to alter internationally set standards in response to a change of mind or a change of circumstances.

RA 1-3 CANADIAN COALITION FOR GOOD GOVERNANCE

- (a) An institutional investor refers to a company or organization which is in the business of investing and which holds large investments in other companies. These include insurance companies, pension plans, mutual funds and others. They differ from other investors in that they devote a significant amount of resources into managing their portfolios and thus are much more developed in terms of their knowledge base and level of sophistication than the average investor.
- (b) The presence of a significant number of institutional investors has an impact on the financial reporting decisions made by management in that management is held more accountable for their financial reporting decisions in this type of environment. Institutional investors demand a level of accountability beyond that of an average investor and are powerful enough to get it since they often hold a significant portion of voting shares and often have members sitting on the boards of the companies they invest in.
- (c) Three of the coalition's largest members were the Canada Pension Plan (CPP) Investment Board, Alberta Investment Management Corporation and the Ontario Teachers' Pension Plan.
- (d) Some of the major investments of these companies are as follows:
 - CPP: Barrick Gold, ING Canada, Goldcorp, Agnico Eagle Mines, Encana Corp
 - Ontario Teachers' Pension Plan: Hitachi, Ltd., OGX Petróleo e Gás Participações S.A., LLX Logística S.A. Deutsche Telekom
 - Alberta Investment Management Corporation: AIMCo invests in infrastructure for example Compañía Logística de Hidrocarburos, S.A. ("CLH") a refined petroleum product pipeline transportation and logistics company in Spain; and private investments in Centre Rockland for example.

RA 1-4 SOX

- (a) The Sarbanes-Oxley Act was enacted in 2002 as a legislative response to the recent corporate bankruptcies and accounting failures (Enron, Worldcom, Arthur Andersen). The Act increased government regulation by increasing resources for the SEC to prevent and combat fraud and improve reporting practices. The key components of the Act's provisions include:
- Establishment of the Public Company Accounting Oversight Board (PCAOB) to establish auditing, quality control and independence standards.
 - Stronger rules with respect to auditor independence including rotation of audit partner every five years and stricter limits on the types of consulting engagements which can be undertaken by a firm for companies which are also audit clients.
 - Accounting restatements will result in the forfeiture of bonuses for CEO's and CFO's.
 - Certification that the financial statements, including disclosures, are fairly presented will be required from CEO's and CFO's.
 - More stringent requirements for both independence and competence (in terms of financial expertise) for members of audit committees.
 - Companies must have a written code of ethics in place for senior financial officers.
- (b) The act resulted in more accountability at all levels and by all those involved in financial reporting, including senior financial officers, auditors, audit committee members. There was an increase in the quality of collection and presentation of financial information, and more focus on enterprise wide risk management. Governance was also improved with more independent Boards and audit committees. Board of directors were made more accountable and responsible for their decisions. However, this came at high costs to companies in the form of audit fees and internal staff costs, and many people have since questioned whether or not the benefits of more regulation actually outweighed the costs. In fact, some companies decided not to list their companies on US stock exchanges but went elsewhere (like London, Tokyo and Hong Kong) because the regulatory requirements were less burdensome. In addition, many small publicly traded companies found that the costs of complying with the regulations were prohibitive and not worth the benefits of being a publicly traded company. As a consequence, there have been a large number of companies that went private in the last few years – partially driven also by the private equity funds available to fund these transactions. Finally, the only way that SOX can really be effective is to change the culture within

RA 1-4 SOX (Continued)

an organization. SOX is about making internal controls more effective within an organization – it is not about documenting and testing the controls.

Just making rules for compliance is not enough – and the amount of resources and time required internally to make these shifts in culture have been much higher than originally expected.

- (c) There were definitely spillover effects in Canada. CSA (Canadian Securities Administrators) felt it was necessary to ensure that Canadian standards were as high as the US, and therefore prepared their own set of Canadian made regulations. They were less stringent than required by SOX, since CSA wanted to limit the level of bureaucracy, but did require similar certification by the officers and disclosure in the MD&A and independence of the Board. However, similar to the US, the CSA received numerous complaints on the costs required to implement these requirements. In response to these complaints, in 2006 and then again in 2008, the CSA amended these requirements to give companies more freedom in selecting their approach to compliance rules given their own specific circumstances. Canada also saw a move by small publicly traded companies to become private once again, since the costs of compliance greatly outweighed the benefits of being public.

Currently, there is some support to move to a more principles-based approach given the fact that you cannot make a rule for everything. In the principles-based approach, the company would have to ensure that it has the controls in place to ensure that financial information is properly disclosed to external investors. The amount and level of these controls will depend on the size and complexity of the company. This concept is similar to accounting standards where professional judgment is required to ensure that the information is faithfully represented for users.

- (d) Student responses may differ based on the benefits and weaknesses identified. A sample response is provided:
- § The implementation of bill S1933 would have benefits to emerging organizations wishing to go public. There are financial costs related to changing auditors and audit firms as it creates repetition of information sharing. The auditors will need to acquire the same basic knowledge about the organization and efficiencies that could be obtained with repeat auditors would be lost. This is one benefit to the new bill.

RA 1-4 SOX (Continued)

(d) Continued

- § A second benefit is that the time devoted to an IPO and going public is demanding on an organization. Fewer requirements for audit standards and SOX compliance during and after this process will allow management to focus on a smooth transition into operating as a public entity with new accounting and reporting standards. Compliance with the numerous SOX standards could function as a barrier to entry, in which case S1933 would help limit that barrier and simplify the process of going public for smaller firms.
- § A risk related to this bill is that repeatedly using the same auditor could lead to potential conflicts of interest. An overly close relationship between management and the auditor may lead to hidden financial information and prevent the auditor from noticing or reporting fraud.
- § The S1933 will have fewer internal control requirements, and a longer window to obtain internal controls audits for high-earning start-ups. Public accounting firms will not need to report on internal controls which could potentially lead to ineffective or poorly operating controls. A weak internal control system may go unnoticed for a significant amount of time which would negatively impact the emerging growth company while also adding risk for investors.

RA1-5 IASB and FASB Convergence

- a) The Update Report discusses two main reasons for the need for changes to revenue recognition standards. The first reason is that U.S. GAAP includes industry specific guidance that can be inconsistent across industries. This impacts the comparability of financial information since different industries can use different standards which in turn reduces the value provided to investors. A second reason for the convergence talks is that the IFRS standards for revenue recognition do not provide application guidance, meaning that it is difficult for preparers of financial information to use IFRS standards. The main revisions will result in more principle-based recognition criteria than the U.S. GAAP standards. This is consistent with the overall convergence goals to result in a more principles based U.S. standard rather than their current rules-based model.

RA1-5 IASB and FASB Convergence (Continued)

- b) The report discusses the need for changes to Impairment standards as the incurred loss model previously used resulted in significant financial issues during the recent financial crisis. The incurred loss model resulted in later recognition of losses which prevented financial statements users from having current information. The proposals of the IASB and FASB are focused to create a standard that has more guidance on the timing of recognizing expected losses. As the Boards recognize that there are different types of investments and expected loss factors, the standard will be principle-based and require greater disclosure so that financial statements have better comparability. As with the revenue recognition changes discussed above, the principles-based IFRS standards help with the comparability of financial statements and U.S. GAAP is moving towards this type of reporting standards.
- c) The differences between the two approaches is that a rules-based approach attempts to create a specific rule for every situation while a principles-based approach sets more general principles which are to be applied to specific situations on a consistent basis. A rules-based approach results in a much larger volume of detailed standards and new rules must continue to be generated to keep up with new situations as they arise. A principles-based approach requires fewer and more general standards that may be applied to new situations as they arise. This difference in the volume of specific knowledge required means that a rules-based approach is more costly to maintain as new rules are generated by standard-setters and as they are learned, applied and audited. A rules-based approach leaves less room for manipulation but only if a specific situation is covered. It also leaves less room for professional judgement. If a specific situation is not addressed under a rules-based approach, preparers may argue that there is no GAAP for that situation and thus feel free to choose any alternative. Under a principles-based approach, preparers are obligated to apply general principles to all situations, whether specifically covered by a rule or not. This leaves room for exercising professional judgement and results in a more theoretically sound system.

RA1-5 IASB and FASB Convergence (Continued)

- d) A principles-based approach is better for the reasons mentioned above. Historic accounting scandals that used “loopholes” in the accounting rules provide evidence that a rules-based approach is not necessarily better. You cannot create a rule for everything. As business transactions become more complex, it is difficult to anticipate the accounting rule that might be required to properly present the information. Hence, the use of professional judgement to ensure that transactions are faithfully represented will ensure that a “true and fair view” of the activities is presented. This may be an impediment for acceptance in the US for IFRS since practitioners are familiar with a rules-based approach and will likely resist change and argue against change. However, in light of the huge scandals in the US, there may be support that what was used in the past is no longer the right way.

RA 1-6 FINANCIAL REPORTING ISSUES

1. The ethical issues that appear in this case are as follows:
 - Troy Normand proceeded to make an entry he felt did not reflect relevant and reliable financial information
 - He succumbed to management and job pressures although he had a moral obligation to ensure the financial statements reflected fairly the financial position of the company
 - He did not act with the best interest of the stakeholders in mind
 - Troy's manager pressured Troy into ignoring his concerns and therefore ignoring his moral and ethical responsibilities to the shareholders
 - Troy's manager is clearly acting with his best interests in mind
2. Troy Normand acted unethically as stated above
3. Troy should have implemented a further investigation of his concerns with full documentation of his findings.
 - It is evident that he was concerned about some of the costs on the income statement and he was also questioning the adjusting entry he was being asked to record
 - As an accountant, he would need to follow codes of ethics where he is required to ensure competency i.e. he should have investigated the situation further to educate himself in all financial matters of the company.
 - If there was doubt in any entries or accounting treatments, he was morally obligated to ensure he was educated by further investigating the situation
 - He should have communicated his concerns to others (e.g. other members of management or outside authorities) rather than overlooking it
4. The stakeholders in this case are investors, shareholders and employees

RA 1-7 PRUDENCE- IMPACT OF IFRS

- a) Hoogervorst discusses several IFRS standards that incorporate the idea of prudence, if not the terminology. Some specific examples include:
- i. There is a requirement for companies to value inventory at the lower of cost and net realizable value. This is a prime example of financial standards requiring companies to exercise caution in order to maintain reliable balance sheets values. Those who prepare financial statements are required to show some level of prudence where the net realizable value of goods falls below their cost, although many of the estimates related to this would be subject to professional judgment.
 - ii. Not only does IFRS require impairment testing to be performed in order to ensure that carrying amounts are not higher than recoverable amounts of balance sheet assets, but IFRS allows for reversals of impairment back to original costs if circumstances of the impairment are changed. Again, IFRS demonstrates the desire to ensure that balance sheets items are neither over nor under stated. This shows conservative recording of assets by encouraging any significant changes in their value to be reported.
 - iii. Risk adjustments are required for mark-to-model fair value measurements. This helps ensure that an overly optimistic estimate by management is at least partially mitigated. The risk adjustment encourages prudence among preparers of financial statements as it requires them to look critically at their estimates and whether the value they are reporting is transparent.
 - iv. Guarantee and warranty liabilities are recorded before they are brought in. This is how IFRS supports the inclusion of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty. Earlier recognition of these liabilities promotes a more prudent approach to financial reporting.

RA 1-7 PRUDENCE- IMPACT OF IFRS (CONTINUED)

- b) There is the potential for professional judgment to impact all of the areas above as each involves some estimation uncertainty. A professional applying the IFRS standards would need to consider whether their estimates are reliable as this will impact the fair value measurement of the asset or liability. There is also the potential for earnings management if the decision-makers make estimates that result in more favourable financial reporting.
- c) The reasons stated by Hoogervorst as to where prudence still exists in the standards are true. While prudence in name has been eliminated there are significant disclosure requirements and guidance on estimates of impairment and assets that encourage decision-makers to consider the fair representation of financial information. While the IFRS standards do not require conservatism but instead require neutrality, it is the responsibility of professionals applying the standards to avoid overly optimistic reporting. IFRS is a valuable tool for presenting financial information and the replacement of prudence with neutrality does not impact the value of financial reporting standards as long as decision-makers are following the guidance in the standards to achieve neutrality.

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CHAPTER 2

CONCEPTUAL FRAMEWORK UNDERLYING FINANCIAL REPORTING

ASSIGNMENT CLASSIFICATION TABLE

Topic	Brief Exercise	Exercise	Problem	Writing assignments
Usefulness of the Conceptual Framework (CF) and main components of CF		5, 7		1
Qualitative Characteristics	1,2,3,9	1,5,6,7	2,3,4,5,7,8	3,5
Elements	4,5,6,7	2,7	2,3,5,8	3
Foundational Principles		2,3,4,5,6,7,8,9,10	1,2,3,5,7,8	
Accounting choices		1,8	2,6,7	
Standard setting trends		8,10		
Fair value	8,10,11	11		4

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E2-1	Qualitative characteristics.	Moderate	20-25
E2-2	Elements of financial statements.	Simple	15-20
E2-3	Foundational principles	Simple	15-20
E2-4	Foundational principles	Moderate	20-25
E2-5	Foundational principles	Moderate	25-30
E2-6	Tradeoffs in financial reporting	Moderate	15-20
E2-7	<i>Accounting principles—comprehensive</i>	Moderate	15-20
E2-8	Full Disclosure	Complex	25-30
E2-9	Going Concern	Simple	15-20
E2-10	Revenue recognition principle	Moderate	15-20
E2-11	Fair Value	Moderate	15-20
P2-1	Financial reporting issues	Simple	10-15
P2-2	Accounting Principles - comprehensive	Complex	30-35
P2-3	Accounting Principles - comprehensive	Complex	30-35
P2-4	Tradeoffs in financial reporting	Moderate	20-25
P2-5	Accounting Principles - comprehensive	Complex	30-35
P2-6	Financial engineering.	Moderate	15-20
P2-7	Issues in financial reporting	Moderate	15-20
P2-8	Qualitative characteristics.	Moderate	20-30

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 2-1

- (a) Completeness**
- (b) Relevance**
- (c) Neutrality**
- (d) Representational faithfulness**
- (e) Predictive value**
- (f) Freedom from material error**
- (g) Feedback value**
- (h) Comparability**
- (i) Understandability**
- (j) Timeliness**
- (k) Verifiability**

BRIEF EXERCISE 2-2

- (a) Verifiability**
- (b) Comparability**
- (c) Timeliness**
- (d) Comparability (knowledge of this fact enables better comparison over time).**
- (e) Neutrality**
- (f) Completeness**
- (g) Freedom from material error**

BRIEF EXERCISE 2-3

- (a) Economic entity or control**
- (b) Full disclosure**
- (c) Matching**
- (d) Historical cost**
- (e) Periodicity and timeliness**
- (f) Going concern**
- (g) Revenue recognition**
- (h) Fair value**

BRIEF EXERCISE 2-4

- a) A corporate fleet of cars for senior management is an asset: the cars are tangible economic resources. The cars have been acquired through a past transaction. Additionally, the cars are present economic resources that produce cash inflows in conjunction with other economic resources – the cars are used by senior management to generate cash flows for the company. By virtue of its ownership, the company has control over the assets.**
- b) A franchise licence to operate a Tim Hortons store is an asset: the licence is an intangible economic resource. It can be sold or used to generate revenues (subject to contractual terms). The agreement grants exclusive ownership and access to the franchisee. Additionally, the contractual rights provide a present economic resource that is not contingent on a future event.**
- c) Customized manufacturing machinery that can only be used for one product line and for which there is a small and limited customer market is an asset: the machine is a tangible economic resource. The fact that it is of limited use or applicability will factor in its measurement or valuation – this does not affect its recognition as an asset. It is capable of providing future economic benefit through its use by the manufacturing company that owns it.**
- (d) The guarantee is a present resource that allows the subsidiary access to capital on a reduced cost basis and resulted from a past transaction or event. The benefit of having the parent company's unconditional promise to pay is reflected through a lower interest rate from the bank. However, assuming the guarantee came at no cost to the subsidiary, in this case, it is not recognized as an asset.**

BRIEF EXERCISE 2-4 (Continued)

(e) If the spring water is freely available to all, it is not a specific asset to FreshWater Inc. Although the water has value, it does not have economic value for purposes of the accounting definition as FreshWater Inc. does not legally own or control the spring and cannot restrict others' access to it.

(f) If Mountain Ski makes the snow on their own slopes, it can be considered their asset – the value may be short-lived however and the associated costs would generally be expensed when incurred. The snow is controlled by Mountain Ski only to the extent it falls on their property (which they have control over). Snow that falls naturally onto the land owned by Mountain Ski would be valued at \$0 since it literally fell from the sky at no cost.

BRIEF EXERCISE 2-5

There is no difference between the current or proposed standards with respect to whether each item would be considered an asset or not, however, the support in each case differs slightly.

- a) A corporate fleet of cars for senior management: the cars are tangible economic resources. The cars can be sold or used. Additionally, the cars are present economic resources that produce cash inflows in conjunction with other economic resources – the cars are used by senior management to generate cash flows for the company. By virtue of its ownership, the company has a right of access to these assets that others do not have.**
- b) Franchise licence to operate a Tim Horton's store: the licence is an intangible economic resource. It can be sold or used (subject to contractual terms). The agreement grants exclusive ownership and access to the franchisee. Additionally, the contractual rights provide a present economic resource that is not contingent on a future event.**
- c) Customized manufacturing machinery that can only be used for one product line and for which there is a small and limited customer market: the machine is a tangible economic resource. It can be sold or used. The fact that it is of limited use or applicability will factor in its measurement or valuation – this does not affect its recognition as an asset.**
- (d) The guarantee is a present resource that allows the subsidiary access to capital on a reduced cost basis. The benefit of having the unconditional promise to pay is reflected through a lower interest rate from the bank. Assuming the guarantee came at no cost to the subsidiary, the guarantee is not recognized as an asset.**

BRIEF EXERCISE 2-5 (Continued)

(e) If the spring water is freely available to all, it is not a recognized asset of FreshWater Inc. Although the water has value, it does not have economic value for purposes of the accounting definition. As FreshWater Inc. does not have an enforceable right to prevent others from using the spring, it is not an asset.

(f) If Mountain Ski makes the snow on their own slopes, it can be considered their asset – the value may be short-lived however and the associated costs would generally be expensed when incurred. The snow is controlled by Mountain Ski only to the extent it falls on their property (which they have control over). Snow that falls onto the land owned by Mountain Ski would be valued at \$0. The snow is freely available to all and not considered to have economic value since it literally fell from the sky and has no cost.

(Note to Instructor – the proposed IFRS definitions are worded to ensure more consistent application. They are not necessarily meant to change the underlying substance of the asset definition).

BRIEF EXERCISE 2-6

- (a) **Environmental remediation after a chemical spill when a law has been broken:** this is a duty or responsibility that the entity must correct and has no discretion to avoid. An entity must follow the laws/regulations of the legal jurisdiction in which it operates with no ability to avoid the cost. These laws result in a legal liability if the entity violates the law. It is enforceable by law or statute. Once the entity has responsibility for the spill, the law will be sufficiently specific for it to be clear that the entity must bear the costs for clean-up. The obligation exists at the balance sheet date, assuming the spill event occurred prior to the balance sheet date, making it a present responsibility.
- (b) **Environmental remediation after a chemical spill when no law has been broken:** If there is no legal burden or requirement to bear the remediation costs, whether there is a liability will depend on whether the entity actually has responsibility for remediation. It must be determined whether there are other means by which remediation is enforceable on the entity, that is, whether there is little or no discretion for the entity to avoid the costs. In some jurisdictions, specific actions by the entity, such as a statement accepting responsibility and agreeing to clean-up costs, may be sufficient to be enforceable in a court of law. Alternatively, it may represent a constructive obligation if the entity has remediated in previous situations; constructive obligations are discussed in Chapter 6 and 13. Again, it is assumed that the spill took place prior to the balance sheet date so that if the entity is obligated, it is a present duty or responsibility.
- (c) **Replanting trees under an existing contract:** A liability exists once the transaction obligating the entity – cutting a tree – occurs (that is, it results from a past transaction or event). After that occurs, the entity has no ability to avoid the cost which will result in a future outflow of resources.

BRIEF EXERCISE 2-6 (Continued)

- (d) Replanting trees based on a voluntary corporate policy: A constructive obligation exists even though the entity may not have a legal requirement to replant trees because its corporate policy has created the expectation that it will do so. See further discussion about constructive obligations in Chapter 6 and 13. It is a duty at the balance sheet date as it resulted from an event that occurred prior to the reporting date.**

BRIEF EXERCISE 2-7

- a) Environmental remediation after a chemical spill when a law has been broken: this is an economic burden or obligation as it will require an outflow of economic resources. An entity must follow the laws/regulations of the legal jurisdiction in which it operates. These laws result in a legal liability if the entity violates the law. The clean-up is a present obligation after the spill occurs since it is then enforceable by law or statute. The entity is clearly the obligor and the law will be sufficiently specific for it to be clear that the entity must bear the costs for clean-up.**
- b) Environmental re-mediation after a chemical spill when no law has been broken: If there is no legal burden or requirement to bear the remediation costs, whether there is a liability will depend on whether there are other means by which an obligation is enforceable on the entity. In some jurisdictions, specific actions by the entity, such as a statement accepting responsibility and agreeing to clean-up costs, may be sufficient to be enforceable in a court of law. Alternatively, it may represent a constructive obligation if the entity has remediated in previous situations; constructive obligations are discussed in Chapter 6 and 13.**
- c) Replanting trees under an existing contract: A liability exists since the entity has an economic burden, the entity is the obligor and the obligation is enforceable by law.**
- d) Replanting trees based on a voluntary corporate policy: A constructive obligation exists even though the entity may not have a legal requirement to replant trees because its corporate policy has created the expectation that it will do so. See further discussion about constructive obligations in Chapter 6 and 13.**

(note to Instructor – the proposed definitions are worded to ensure more consistent application. They are not necessarily meant to change the underlying substance of the liability definition)

BRIEF EXERCISE 2-8

In general, the following should be noted:

In assessing whether an item is an asset, consideration is needed of these three essential characteristics:

- 1. There is some future economic benefit to the entity.**
- 2. The entity has control over that benefit.**
- 3. The benefit results from a past transaction or event.**

Expenses are defined as decreases in assets through the ordinary revenue-producing activities of a company.

- (a) The land is a tangible economic resource owned by the company. The legal fees should be debited to the land account, as they are directly associated with acquiring the land (historical cost principle). These costs are associated with the land – they are not expenses associated with revenue producing activities and do not meet the definition of an expense.**
- (b) This is a tangible economic resource owned by the company. The driveway will last and have value for many years, and therefore it should be capitalized and depreciated.**
- (c) The contract provides a right for six months that is not contingent on future events. Only Alan and Cheng have the right to use the premises during the lease period (economic benefit). A prepaid asset will be established; the rent will be recognized as an expense over the 6-month period.**

BRIEF EXERCISE 2-8 (Continued)

- (d) The building is a tangible economic resource being constructed by the company. Wages paid should be debited to the Building account during its construction, as they are part of the cost of that asset which will contribute to operations for many years (historical cost principle). They are also directly related to the construction of the building and required in order to get the asset ready for its intended use. These expenditures are not associated with the revenue producing activities of the enterprise and do not meet the definition of an expense in the current period.**
- (e) The patent represents an intangible economic resource; this resource provides a right that others do not have. The legal fees should be debited to the 'intangible asset' account since they are directly related to the patent that will contribute to future cash flows (historical cost). They are required in order to get the asset ready for its intended use.**
- (f) The delivery does not represent an economic resource; it represents an operating expense, as the benefits are used up as the service is provided. There are no future benefits. These costs are not associated with the flower inventory, and therefore they meet the definition of an expense.**
- (g) The flowers represent a tangible economic resource. The shipping costs are related to the flowers for sale and should be debited to the 'inventory' account as part of their historical cost. These costs are directly associated with the acquisition of the inventory – they are not expenses from revenue producing activities until the flowers are sold to customers.**

BRIEF EXERCISE 2-9

- (a) Equity – residual interest of owners**
- (b) Revenues – ordinary activities of company**
- (c) Assets**
- (d) Assets**
- (e) Expenses – ordinary activities of company**
- (f) Losses – peripheral or incidental activities**
- (g) Liabilities**
- (h) Equity – Distributions to owners**

- (i) Equity – Investments by owners**

BRIEF EXERCISE 2-10

- (a) Periodicity**
- (b) Monetary unit**
- (c) Full disclosure**
- (d) Control**
- (e) Revenue recognition**
- (f) Recognition**
- (g) Full disclosure**
- (h) Historical cost**
- (i) Fair value**
- (j) Going concern**

BRIEF EXERCISE 2-11

The objective of financial reporting is to communicate information that is useful to investors, creditors, and other users in making their resource allocation decisions (including assessing management stewardship) about the economic resources and claims on them, as well as the financial performance. This objective represents the goals and purposes of financial accounting.

- (a) Representational faithfulness - neutrality – Financial information should not favour one user or stakeholder over another. In addition, verifiability is a reasonable choice.**
- (b) Relevance – Financial information that makes a difference in the decision making of a user is being provided.**
- (c) Representational faithfulness – Accounting information should reflect the economic substance of business events or transactions. The lease, in substance, represents a financing arrangement through which Mohawk is purchasing the asset.**
- (d) Representational faithfulness - neutrality – Standards too must remain neutral and free from bias, regardless of the economic consequences.**

***BRIEF EXERCISE 2-12**

Investment 1—Level 3. Level 3 is the least reliable level since much judgement is needed based on the best information available. This often includes management judgements about how the markets would value the asset.

Investment 2—Level 1. Level 1 inputs provide the most reliable fair values because these inputs are based on quoted prices in an active market for the exact same item.

Investment 3—Level 2. Level 2 considers evaluating similar assets or liabilities in active markets or using observable inputs such as interest rates or exchange rates.

***BRIEF EXERCISE 2-13**

Scenario 1: Cash flows are fairly certain

When the cash flows are fairly certain, the traditional approach works well. Under this approach, the stream of cash flows is discounted at a rate that reflects the riskiness of the cash flows. Therefore, the 6% rate would be used.

As such, the present value would be determined as follows:

PV of an annuity for 5 years at 6% = \$421.24*

***using the PV factor of 4.21236 for an ordinary annuity at 6%**

Scenario 2: Cash flows are uncertain

When the projected cash flows are uncertain in timing or amount, the expected cash flow method works best. Under this approach, a risk-free rate is used to discount cash flows that have been adjusted for associated uncertainties. Additionally, this approach is more flexible when the cash flows vary over the term. As such, the present value would be determined as follows:

PV of [(25% X \$75) + (75% X \$100)] at 3% in five years

PV of \$93.75 at 3% in five years = \$80.87 **

**** using PV factor of .86261**

SOLUTIONS TO EXERCISES

EXERCISE 2-1 (20-25 minutes)

- (a) Feedback value.**
- (b) It is generally the role of professional judgement to identify and balance tradeoffs between fundamental qualitative characteristics and enhancing qualitative characteristics. These include: between relevance and representational faithfulness; between relevance and verifiability; between relevance and comparability; between relevance and timeliness; between relevance and understandability. Note that the fundamental qualitative characteristics have precedence over the enhancing characteristics.
Constraint: Cost/Benefit
Note – other examples are also acceptable**
- (c) Neutrality.**
- (d) Not acceptable – in many cases, this goes against representational faithfulness. We should consider the substance of a transaction as well as its legal form.**
- (e) Neutrality.**
- (f) Understandability.**
- (g) Timeliness.**
- (h) Relevance.**
- (i) Comparability.**
- (j) Verifiability.**
- (k) Freedom from material error or completeness.**

EXERCISE 2-2 (15-20 minutes)

(a)

- 1. Gains, Losses.**
- 2. Liabilities.** – would be a liability under both current and proposed definitions
- 3. Equity (increase).**
- 4. Equity (decrease).**
- 5. Assets.** – would be assets under both current and proposed definitions
- 6. Expenses.**
- 7. Revenues (inflows of net assets) or expenses (outflows of net assets).**
- 8. Equity.**
- 9. Revenues,** if it is the sale of a product sold in the normal course of business; otherwise it would be a gain.
- 10. Equity (decrease).**

(b)

- 1. Asset** – the contract represents a future economic benefit to which the entity is entitled and has control over. However, the amount of the benefit is uncertain: the fact that future recordings are necessary will factor into the valuation or measurement of the asset, and so it may not be recorded at any amount. Under the proposed definition, the contract is a present economic resource to which the entity has a right that is legally enforceable. As such, it would still meet the definition of as asset. Measurement uncertainty would be taken into account upon measurement (which may be zero when signed as noted above).
- 2. Asset** – consignment inventory belongs to ReadyMart until it is sold to the final customer. It represents a benefit as it can be sold. The company still controls/has access (through legal title) even though physical possession is with the local retailer. This is the case under either the current or proposed definitions of an asset.

EXERCISE 2-2 (15-20 minutes) (Continued)

- 3. Liability – this contract represents an obligation that will result in the future outflow of resources, subject to the sale of the recordings. However, the transaction that obligates the company – sale of recordings – has to occur. At that point, a liability would exist. Under the proposed definition, the contract represents an unconditional requirement and an obligation that is presently enforceable, and so would meet the definition of a liability in either case. Under the proposed definition, the uncertainty would be taken into account on measurement.**

EXERCISE 2-3 (15-20 minutes)

- (a) 4. Matching**
- (b) 8. Historical cost**
- (c) 10. Full disclosure**
- (d) 7. Going concern**
- (e) 2. Control**
- (f) 1. Economic entity**
- (g) 5. Periodicity**
- (h) 9. Fair value**
- (i) 3. Revenue recognition and realization**
- (j) 6. Monetary unit**

EXERCISE 2-4 (20-25 minutes)

- 1. Monetary unit**
- 2. Full disclosure**
- 3. Historical cost and matching**
- 4. Going concern**
- 5. Fair value**
- 6. Historical cost**
- 7. Full disclosure**
- 8. Revenue recognition and realization**
- 9. Full disclosure**
- 10. Full disclosure**
- 11. Economic entity**
- 12. Periodicity**
- 13. Matching/fair value**
- 14. Historical cost**
- 15. Matching**

EXERCISE 2-5 (25-30 minutes)

(a) A conceptual framework is useful for standard setters since having an established body of concepts and objectives helps them to develop additional useful and consistent standards. This results in a coherent set of standards and rules that are built upon the same foundation. An understanding of the underlying concepts helps the preparer and the auditor ensure consistent and meaningful application of the principles. Such a framework also increases the financial statement user's understanding of, and provides confidence in, financial reporting. It also enhances comparability of different companies' financial statements.

(b) Foundational principle or characteristic violated:

- 1. Periodicity; relevance (predictive and feedback value); timeliness**
- 2. Historical cost; verifiability; relevance**
- 3. Historical cost or matching; comparability; representational faithfulness; relevance**
- 4. Revenue recognition and realization; representational faithfulness**
- 5. Full disclosure; representational faithfulness; relevance**
- 6. Economic entity; free from material error, representational faithfulness**
- 7. Control; comparability; representational faithfulness**
- 8. Matching; free from error; relevance**
- 9. Full disclosure and representational faithfulness (neutrality)**

(Note that other principles/characteristics may also be discussed. There is rarely a single right and wrong answer to these types of questions.)

EXERCISE 2-6 (15-20 minutes)

- 1. While both of the fundamental qualities (relevant and representational faithfulness) should be present for financial information to be decision-useful, tradeoffs are often necessary. As an example, in an attempt to provide more relevant information, some additional time may be needed to compile the data (i.e. affecting timeliness), or perhaps some additional estimates or assumptions must be made (i.e. affecting verifiability). Providing complete and full information may impact understandability of the information.**
 - a. Additionally, there is a constraint in financial reporting: Cost/Benefit – information is not cost-free. The costs of providing the financial information should not outweigh the benefits of the financial information to its users.**
 - b. Further, materiality must be considered when assessing the relevance of information – information must have the potential to make a difference in the decisions being made, otherwise it is irrelevant.**
 - c. The goal is to provide a balance between the required level of detail but also make it condensed enough so that it is understandable at a reasonable cost. More is not always better.**
- 2. Professional judgement must be exercised to ensure that the end product assists users in their decision making.**

EXERCISE 2-7 (15-20 minutes)

1. Definition of element – asset

Foundational principles – historical cost and matching

Maintenance and repairs expense	2,000	
Accounts payable		2,000

2. Qualitative characteristic – representational faithfulness

Definition of element – revenue

Foundational principles – revenue recognition

Cash	18,000	
Unearned revenue		18,000

3. Definition of element – asset

Qualitative characteristic – representation faithfulness

Inventory held on consignment is not an economic resource of Bounce; it is an economic resource to Rubber and Rubber has the right to this inventory. NO journal entry should be made by Bounce until the sale of the inventory to a third party.

4. Definition of element – expense

Foundational principles - matching

Qualitative characteristic – representational faithfulness

Prepaid insurance	4,000	
Cash		4,000

For item 4, a principle is not necessarily violated if the company is using the alternative method of recording prepayments and the appropriate adjusting entry is created as part of the year-end process.

EXERCISE 2-8 (20-25 minutes)

(a)

The financial statements are a formalized, structured way of communicating financial information. The full disclosure principle requires that information that is required for fair presentation that is relevant to decisions should be included in the financial statements, including the related notes. The notes are not only helpful to understanding the enterprise's performance and position—they are a required component of the financial statements. The full-disclosure principle recognizes that the nature and amount of information included in financial reports reflects a series of judgmental tradeoffs. These tradeoffs aim for information that is:

- detailed enough to disclose matters that make a difference to users, but
- condensed enough to make the information understandable, and also appropriate in terms of the costs of preparing and using it.

More information is not always better. Too much information may result in a situation where the user is unable to digest or process the information.

Information about a company's financial position, income, cash flows, and investments can be found in one of three places:

1. in the main body of financial statements
2. in the notes to the financial statements
3. as supplementary information, including the Management Discussion and Analysis (MD&A)

EXERCISE 2-8 (Continued)

Some important points to remember:

- 1. Disclosure is not a substitute for proper accounting.**
- 2. The notes to financial statements generally amplify or explain the items presented in the main body of the statements.**
- 3. Information in the notes does not have to be quantifiable, nor does it need to qualify as an element. Notes can be partially or totally narrative. Examples of notes are:**
 - descriptions of the accounting policies and methods used in measuring the elements reported in the statements
 - explanations of uncertainties and contingencies
 - statistics and details that are too voluminous to include in the statements
- 4. Supplementary information may include details or amounts that present a different perspective from what appears in the financial statements. They may include quantifiable information that is high in relevance but low in reliability, or information that is helpful but not essential.**

(b)

- 1. It is well established in accounting that revenues and expenses, including the cost of goods sold (or raw materials/consumables used), must be disclosed in the income statement. Disclosure of specific items such as interest expense and depreciation expense is mandatory under GAAP. Showing additional details also meets the objectives of financial statements for relevance: the classifications on the income statement help in providing predictive and feedback information. It also separates major categories of elements such as revenues from gains, and expenses from losses.**

EXERCISE 2-8 (Continued)

- 2. The proper accounting for this situation is to report the full cost of the equipment as an asset and the note payable as a liability on the balance sheet. Offsetting is permitted in only limited situations where certain assets are contractually committed to pay off specific liabilities. Not showing the items separately would mean that certain elements of the financial statements would be missing and some key ratios would be affected. This also violates the cost principle since the equipment would not be shown at its acquisition cost.**
- 3. One might argue that this event need not be disclosed in the financial statements since the amount of money involved is relatively small (i.e. not material) in relation to the net income of the business and should not affect the fairness of the presentation of the financial statements. Having said that, investors and other users might find this information material regardless of the size and the loss should therefore be reported, even if not separately identified as a line item on the statement.**
- 4. According to GAAP, the basis upon which inventory amounts are stated (lower of cost and net realizable value) and the method used in determining cost (FIFO, average cost, etc.) should also be reported. The disclosure requirement related to the method used in determining cost should be emphasized, indicating that where possible alternatives exist in financial reporting, disclosure in some format is required. Assuming the categories of inventory are material, disclosure of the amounts of raw materials, goods in process and finished goods would also be reported, likely in a note cross referenced to the balance sheet.**

EXERCISE 2-8 (Continued)

5. A change in depreciation method is considered to be a change in estimate of the pattern in which the entity receives benefits from the asset. Therefore, it is accounted for prospectively; i.e., in the current and future periods only. Estimates are a fundamental part of accounting and to constantly go back and restate previous statements every time management changes its estimates would actually work against the idea of comparability. However, if the change in estimate has a significant effect on current or future periods, the change in estimate should be disclosed. This is consistent with the full disclosure principle.

EXERCISE 2-9 (15-20 minutes)

- (a) The going concern assumption implies that a business entity will continue its operations for the foreseeable future and will be allowed to realize or utilize its assets and discharge its obligations in the normal course of business. This assumption affects the accounting measurement base for financial statement preparation and the allocation of costs and revenues among accounting periods. It is the basis of accrual accounting.**
- (b) If the assumption is not applicable, the historical cost principle loses its usefulness. Under this scenario, asset and liability values are better stated at net realizable values; additionally, the current versus non-current classification of assets and liabilities loses its significance. Depreciation policies are irrelevant since there is no longer a concern with allocating costs to future revenues.**
- 1. Net realizable value**
 - 2. Would not be disclosed. Liabilities would be valued at the amount required to be settled immediately and all would be presented as currently payable.**
 - 3. Would not be recognized. Depreciation would be inappropriate if the going concern assumption no longer applies. Assets would be valued at net realizable value.**
 - 4. Net realizable value.**
 - 5. Net realizable value (i.e. redeemable value).**

EXERCISE 2-10 (15-20 minutes)

(a) Under the revenue recognition principle, revenue is recorded when:

- **Risks and rewards have passed**
- **Revenue is measurable; and,**
- **Collectability is assured**

This model is further discussed in Chapter 6.

(b) Using the revenue recognition principle discussed in this chapter, revenue would be recorded as follows:

- 1. Since the sales effort (i.e. passing of risks and rewards) is not complete until the flight actually occurs, revenue should not be recognized until December.**
- 2. If collection can be reasonably assured and an estimate of uncollectible amounts can be made, then revenue can be recognized at the point of sale when the risks and rewards transfer to the purchaser. If an estimate for uncollectible amounts cannot be made, accounting reverts to a cash basis, and the sale is not recorded until payment is received (further discussed in chapter 6).**
- 3. Revenue should be recognized on a per game basis over the season from April to October.**
- 4. Revenue should be recorded at the time the sweater is shipped to the customer and charged to her credit card. Companies selling using on-line catalogues usually estimate an allowance (and a charge against sales) for expected returns, all based on prior experience or industry norms. The company would also use their past experience in estimating bad debt expense and an allowance for doubtful accounts. The usual treatment, therefore, is to recognize revenue when the goods are shipped, and to estimate any future charges that may arise in connection with that revenue.**

***EXERCISE 2-11 (15-20 minutes)**

(a) At a minimum, an entity must determine

- **the particular asset being measured (its condition, specific nature, location, etc.)**
- **whether the assets will be valued by the market as a group or on a stand-alone basis – the highest and best use that is legally, physically, and financially possible will be used**
- **availability of data, valuation technique to use, use of observable inputs**

(b) There are three levels in the fair value hierarchy

Level 1	level 1 inputs provide the most reliable fair values because these inputs are based on quoted prices in an active market for the exact same item
Level 2	level 2 is the next most reliable and considers evaluating similar assets or liabilities in active markets or using observable inputs such as interest rates or exchange rates.
Level 3	level 3 is the least reliable level since much judgement is needed based on the best information available. This often includes management judgements about how the markets would value the asset.

***EXERCISE 2-11 (15-20 minutes) (Continued)**

(c)

Land – standalone	Level 1- Markets for land and real estate in general may not be very liquid nor necessarily transparent. Also there would be little if any evidence regarding sales of an <u>identical</u> piece of land. Therefore it is likely that no level 1 inputs are available. Level 2 – quoted market prices for similar properties in the area could be obtained. It would depend on whether or not the real estate market was experiencing sufficient volume. Sufficient volume to form a “normal market” would result in better information. Level 3 – management assumptions about how the market would value the land. In all likelihood, the company would have to rely on level 3 inputs to value the land, given the uniqueness of real estate in general.

***EXERCISE 2-11 (15-20 minutes) (Continued)**

Building – standalone	Level 1- quoted market prices do not likely exist for the building. The market may publish statistics such as price per square footage however, these would likely be an aggregation of all buildings in the area and as such would not necessarily reflect market prices for this particular building. It is unlikely that level 1 inputs would exist for the building. Level 2 – see above comments. The prices per square foot may qualify as level 2 inputs (e.g. similar assets) as long as the market was active (sufficient transactions). Level 3 – management assumptions about cash flows that could be generated from the use of the building/discount rates.
Equipment – standalone	Level 1 – perhaps a market price exists for used equipment although if the equipment were older, it may be difficult to obtain the price for identical equipment. Level 2 – perhaps a market price exists for similar used equipment. Markets for used equipment often exist. Level 3 – management assumptions about cash flows that could be generated from the use of the equipment/discount rates.
Overall manufacturing plant (i.e. value in use)	Level 1 – unlikely to be an active market for the exact facility given its uniqueness. Level 2 – perhaps a market multiple or price/earnings ratio exists for similar lines of business. Level 3 – management assumptions about cash flows that could be generated from the use of the facility as a whole/discount rates.

EXERCISE 2-12 (15 – 20 minutes)

(a) Hoda must consider the following three items:

- The amount of cash flows that are expected from the investment. Dividends have been received in the past, but management would have to consider if those dividends are expected to continue and in what amount.
- The timing of the cash flows. Since cash flows will need to be discounted to a present value, it is relevant to consider when the cash is expected to be received.
- The risk involved in the cash flows. Hoda will need to consider the discount rate to be used in calculating the present value and whether that discount rate needs to be a risk-adjusted rate, or if the cash flows will be adjusted for risk of uncertainty

Hoda will also need to consider how long the shares are intended to be held for, and what their purpose is for this investment – is it just to collect dividends, or do they intend to derive some other economic benefit from this company if they have some ability to exert some influence with their 25% ownership.

(b) Under the traditional approach, cash flows are discounted using the credit adjusted rate:

Annual cash expected = 80,000 x PV factor of annuity, 5 years, 6%

= 80,000 x 4.21236 = 336,989

Plus the sale proceeds expected at the end of year 5:

1,000,000 x PV factor of lump sum, 5 years, 6%

= 1,000,000 x .74726 = 747,260

The fair value is the sum of the two amounts:

= 336,989 + 747,260 = \$1,084,249

EXERCISE 2-12 (15 – 20 minutes) (Continued)

- (c) Under the expected cash flow approach, cash flows are adjusted for risk and are discounted at the risk free rate, since the cash flows already incorporate risk expected.**

In this case, there is an 80% chance dividends of \$80,000 will be received and a 20% chance they will be \$50,000.

The probability weighted annual cash flow is:

$$80,000 \times 80\% = 64,000$$

$$50,000 \times 20\% = \underline{10,000}$$

$$74,000$$

Discounting the cash flows:

Annual cash flow = 74,000 x PV factor of annuity, 5 years, 4%

$$= 74,000 \times 4.45182 = 329,435$$

Plus the sale proceeds expected at the end of year 5:

1,000,000 x PV factor of lump sum, 5 years, 4%

$$= 1,000,000 \times .82193 = 821,930$$

The fair value is the sum of the two amounts:

$$= 329,435 + 821,930 = \$1,151,365$$

- (d) The expected cash flow approach is best since the cash flows are uncertain.**

TIME AND PURPOSE OF PROBLEMS

Problem 2-1 (Time 10-15 minutes)

Purpose—the student is asked to describe the fundamental issues in financial reporting.

Problem 2-2 (Time 30-35 minutes)

Purpose—to provide the student with an opportunity to review again the basic principles, assumptions and constraints illustrated in the chapter. The student is asked to consider user needs and possible IFRS options.

Problem 2-3 (Time 30-35 minutes)

Purpose—to provide the student with the opportunity to examine a series of transactions that are biased towards understating net income. The student must recalculate the effect on NIBT after proposing adjustment.

Problem 2-4 (Time 20-25 minutes)

Purpose— to provide the student with an opportunity to describe various characteristics of useful accounting information and to identify possible trade-offs among these characteristics and to provide examples of trade-offs.

Problem 2-5 (Time 30-35 minutes)

Purpose— to provide the student with an opportunity to review again the basic principles, assumptions and constraints illustrated in the chapter. The student is asked to agree or disagree with each of these situations.

Problem 2-6 (Time 15-20 minutes)

Purpose— to provide the student with the opportunity to examine a series of transactions that involve financial engineering and to determine where on the continuum of choices in accounting decision-making the transactions fall.

Problem 2-7 (Time 15-20 minutes)

Purpose—to provide the student with the opportunity to discuss considerations and tradeoffs in financial reporting.

Problem 2-8 (Time 20-30 minutes)

Purpose— to provide the student with the opportunity to discuss the relevance and reliability of financial statement information. This case provides a good writing exercise for students, as the instructions require the answer to be presented in the form of a business letter.

SOLUTIONS TO PROBLEMS

PROBLEM 2-1

Recognition/ derecognition: deals with the act of including something in the company's financial statements. Accounting standards provide criteria or guidance as to whether an item should be recognized, how it should be recognized, and when it should be recognized. Standards also cover when items are derecognized, or removed from the financial statements.

The broad principles associated with recognition/derecognition are economic entity, control, revenue recognition/realization, and matching.

Measurement: business transactions must be converted to dollar values in order to be recorded in the financial ledgers. Accounting standards provide criteria or guidance on the method(s) to be used for measurement and how to apply these method(s).

The broad principles associated with measurement are periodicity, monetary unit, going concern, historical cost, and fair value.

Presentation: various classifications are available for portraying accounting balances in the financial statements – short term v. long term; current v. noncurrent; operating v. nonoperating, debt v. equity, etc.

Disclosure: accounting information may be provided on the face of the financial statements, in parentheses, or in notes.

The broad principle associating presentation and disclosure is full disclosure.

PROBLEM 2-2

- (a) It should be noted that the users are sensitive to Fuster's debt, equity, and asset amounts since they are used to calculate debt covenant requirements. If these amounts are not appropriately recognized, measured, presented, and disclosed, the users could make incorrect decisions.

Additionally, since the management bonus is partially dependent on the revenues for the year, this figure is also sensitive for the internal users.

- (b) Appropriate accounting for each transaction:

Transaction 1.

Depreciation is an allocation of cost, not an attempt to value assets. As a consequence, even if the value of the building is increasing, the remaining costs related to this building should be matched with revenues on the income statement. A change in the residual value is a change in accounting estimate, requiring the determination of a revised depreciation rate. As such, making no entry violates the matching principle.

This error will affect the equity and assets used in the covenants. By failing to record depreciation expense in the year, net income and ending shareholders' equity are both overstated as is the return on assets ratio. This error likely does not affect the management bonus that is based partially on revenues reported, unless the other part is based on net income, for example.

Transaction 2.

This transaction should not be recorded at this time, as no business or economic transaction has occurred. This entry violates the representational faithfulness quality and also does not satisfy the requirements of the 'recognition' principle: the definition of an 'element' (i.e. asset or liability) and the probability criteria have not been fulfilled. Historical cost principle is also violated.

An asset will be recognized only when the item is actually purchased or the equipment is upgraded. Additionally, no liability exists; there is no obligation for Fusters to install the pollution control equipment until the legislation is actually passed in the future. The company is currently in compliance with environmental laws and feels that they are acting in a responsible manner regarding dealing with pollution.

PROBLEM 2-2 (Continued)

This error affects both the asset and liability numbers in the debt covenants. No effect on the management bonus of this error, depending what the other part of the bonus is based on.

Transaction 3.

The disposal and associated gain should be recognized when they occur. Deferral of the gain is not permitted, as it has been both realized and earned. The future purchase is a separate transaction and must be accounted for separately from the disposal. Netting and offsetting the transactions is not permitted.

This error will affect the equity (gain not recorded in net income affecting retained earnings) in the covenant calculation as well as the return on assets, as the net income is likely the numerator for that ratio. This 'gain' (i.e. peripheral activities) likely does not affect the bonus which is based on 'revenues' from ordinary operating activities

Transaction 4.

Based on the information provided, the sale should be recorded in 2014 instead of 2013. In this situation the shipping terms are irrelevant (whether the terms are FOB shipping point or FOB destination) since the transaction occurred in 2014.

This error affects equity and assets (accounts receivable) in the debt covenant calculations. This error also affects revenue, thus impacting the management bonus.

(c) Option exists for Transaction (1)

As indicated above, instead of making no depreciation entry in the year, the company must recognize depreciation expense. However, with an increase in the residual value, the annual depreciation expense can be reduced below the \$45,000 amount under the past estimates.

As discussed later in the text (see Chapter 10) there is an additional option under IFRS for property, plant, and equipment. The revaluation method may be used and the revaluation gain will be recorded in other comprehensive income in equity. However, the need for a depreciation entry remains unchanged under IFRS.

This option would permit Fusters to account for the fair value changes in its property, plant and equipment; thereby providing more relevant decision-useful information to its users without violating the accounting principles.

PROBLEM 2-3

1. This entry is fine as long as the land is determined to be impaired or is designated as held for sale by the company. Losses are generally recognized when they are likely or probable and measurable. As prices are depressed, the company should review for impairment (further discussed in Chapter 11) and/or make a decision as to whether the land is held for sale (further discussed in chapter 4). If impaired, the land would be reduced to its recoverable amount (higher of value in use and fair value less cost to sell). If designated as held for sale, the land would be written down to fair value less cost to sell.

This entry, by reducing net income, would lower the divorce settlement available to the president's wife so care should be taken regarding the above analysis to ensure that it is properly supported.

2. The historical cost principle indicates that assets and liabilities are accounted for on the basis of cost. If we were to select sales value, for example, we would have an extremely difficult time establishing a sales value for a given item without selling it. It should further be noted that the revenue recognition principle provides the answer to when revenue should be recognized.

Revenue should be recognized when the risks and rewards have passed. In this situation, an earnings process has definitely not taken place.

This error, by inflating net income, would have increased the divorce settlement available to the president's wife.

3. General recognition criteria state that an item should be recognized when it: meets the definition of an element; it is probable; and it is measurable. In this case, the lawyers have given an opinion that the loss is not probable.

Further, the definition of a liability has not been met as there is not a current obligation requiring future settlement. The payment is contingent upon a future event. It is not clear that the company is at fault and at the present time, they have broken no laws or created any expectations that they will settle. This event would not require recognition based on these general criteria.

Further, neutrality is likely being violated by this overly conservative accounting. It might seem that the loss has been recorded to reduce net income to impact the divorce settlement.

PROBLEM 2-3 (Continued)

This error, by reducing net income, would lower the divorce settlement available to the president's wife.

4. Accountants (and GAAP) do not recognize price-level adjustments in the accounts (unless the company is in a hyperinflationary economy and constrained by IFRS). Hence, it is misleading to deviate from the assumption that the value of the measuring unit does not change. It should also be noted that depreciation is not so much a matter of valuation as it is a means of cost allocation. Assets are not depreciated on the basis of a decline in their fair market value, but are depreciated on the basis of systematic charges of costs against revenues as the asset benefits are used up. This error, by reducing net income, would incorrectly lower the divorce settlement available to the president's wife.
5. Most accounting methods are based on the assumption that the business enterprise will have a long life. Acceptance of this assumption provides credibility to the historical cost principle, which would be of limited usefulness if liquidation were assumed. Only if we assume some permanence to the enterprise is the use of depreciation policies justifiable and appropriate. Therefore, it is incorrect to change to a liquidation value as Lucky Bamboo, Inc. has done in this situation. It should be noted that only where liquidation appears imminent is the going concern assumption inapplicable. In addition, the acquisition of the goodwill was a current period transaction, so it is doubtful the goodwill would be considered impaired after so little time. It is unlikely that any entry should be made in this situation.

Also note that when goodwill is tested for impairment and needs to be written down, the debit is made to a loss account – not directly to retained earnings as indicated in the journal entry provided (further discussed in Chapter 12).

6. The answer to this situation is the same as 2.

PROBLEM 2-4

- (a) (Note to instructor: There are a multitude of answers possible here. The suggestions below are intended to serve as examples only.)
1. Forecasts of future operating results and projections of future cash flows may be highly relevant to some decision makers. However, they would not be as verifiable as historical cost information about past transactions. Additionally, such information would require estimates and assumptions that would increase the subjectivity of the information.
 2. Proposed new accounting methods may be more relevant to many decision makers than existing methods. However, if adopted, they would make trend comparisons of an enterprise's results over time difficult or impossible.
 3. Providing estimates of future cash flows would be useful for decision making, but they involve significant data which may be time-consuming to obtain and may be somewhat subjective.
 4. Occasionally, relevant information is exceedingly complex. Judgement is required in determining the optimum trade-off between relevance and understandability. Information about the impact of general and specific price changes may be highly relevant but not understandable by all users.
- (b) Financial information must be relevant and representationally faithful. Often the other enhancing characteristics of useful information may have to be sacrificed. Although trade-offs result in the sacrifice of some desirable quality of information, the overall result should be information that is more useful for decision-making. What the proper trade-off is will depend on the facts and circumstances - ultimately, this will come down to the users' needs.
- The accounting profession is continually striving to produce financial information that meets all of the qualitative characteristics of useful information.

PROBLEM 2-5

1. Agree. This is a change in how Sheridan does business. The revenue recognition principle requires that the risks and rewards of ownership be transferred to the purchaser in order for the sale to be recognized. While the shipping terms have been changed, further investigation should be undertaken to ensure that customer business practices are aligned with this changed policy. For example, if the company will continue to replace items lost or damaged in transit, the risks have not passed, irrespective of the change in shipping terms, and the timing of revenue recognition should not change. (further discussed in Chapter 6).

2. Agree. Depreciation is a means of cost allocation on a systematic charge against revenues. As it is based on best estimates, the useful life, and resulting depreciation expense, should be revised when economic or business events dictate that an asset will remain useful for a longer period. While comparability is impaired, changes in estimates are accounted for prospectively. Restatement would not provide decision useful information, since depreciation of the prior periods was determined with the best estimates available at the time. All estimates and judgements used to prepare the financial information should be free from bias, error or omission. The change is acceptable as long as it is supported by evidence that the equipment is lasting longer and is not a change simply to reduce annual depreciation expense.

3. Agree. The full disclosure principle recognizes that reasonable condensation and summarization of the details of a corporation's operations and financial position are essential to readability and comprehension. Thus, in determining full disclosure the accountant makes decisions on the basis of whether omission will cause a misleading inference by the reader of the financial statements. Only the total amount of cash is generally presented on a balance sheet, unless some special circumstance is involved such as a possible restriction on the use of the cash. In most cases, however, the company's presentation would be considered appropriate and in accordance with the full disclosure principle. Showing the additional detail on the balance sheet would not be relevant to the reader.

PROBLEM 2-5 (Continued)

4. Disagree. The historical cost principle indicates that assets and liabilities are accounted for on the basis of cost. If we were to select sales value, for example, we would have an extremely difficult time in attempting to establish an appraisal value for the given item without selling it (i.e. verifiability violated). It should further be noted that the revenue recognition principle provides guidance as to when revenue should be recognized. In this case, the revenue was not earned because the transfer of risks and rewards (i.e. "sale of the land") had not occurred. In addition the development costs of subdividing the land should be included in inventory cost of the lots and appear on the balance sheet, and not as expenses of the period. These costs are associated with the land (economic resource) – not an expense associated with the revenue producing activities for the year.

NOTE: IFRS allows investment property to be measured at fair value. Land to be developed and sold does not qualify as investment property, so this standard does not apply (IFRS 40.08 and .09). The company could use the revaluation model as an accounting policy choice under IAS 16. (This will be covered in Chapter10).

5. From the facts it is difficult to determine whether to agree or disagree with the president. Comparability requires that accounting entities give accountable events the same accounting treatment from period to period for a given business enterprise. The choice of accounting policy should not be made based on the impact on net income but rather on the method that provides the most relevant information (i.e. neutrality and free from bias could be violated). It might be useful for users if Sheridan reports on a moving average basis as it would make the statements more comparable across other companies in the same industry
6. Disagree. While there is an economic burden as a result of the new legislation, this is not a present obligation since the new law cannot be enforced until 2019. A liability does not exist in fiscal 2014.
7. Disagree. The voluntary recall establishes an unconditional economic burden for Sheridan. This is a present obligation that is legally enforceable based on Sheridan's recall announcement. A liability should be provided at the time the recall is made.

PROBLEM 2-6

1. This transaction may be a bona fide business transaction but it is structured to minimize the impact on debt covenants. By modifying the payment terms (and with the creditor's agreement), the company president will move the payable into long-term debt and improve the company's current ratio. Care should be taken to ensure all legal documentation is in place on a timely manner so that the financial statements reflect the true nature of the transaction.
2. This may be an aggressive interpretation of GAAP. Capital assets should be tested regularly for impairment and written down when their cost will not be recovered. The timing of the write-down to coincide with lower levels of net income indicates that the controller may be trying to show improved financial results in future years. The controller is taking advantage of current poor financial results to write down the capital assets, thereby improving future years' results when those write-downs would have otherwise been recorded.
3. This is an example of a bona fide business transaction with no bias. Companies should select the inventory cost assumption that best approximates the cost flow. As well, under GAAP, this change in accounting policy would be accounted for retrospectively – hence full disclosure would sufficiently inform the users.
4. Under IFRS, companies must capitalize interest on self-constructed assets; under ASPE, companies have an accounting policy choice. Since the policy is applied to only one property, this indicates that the policy may have been set with key financial ratios in mind. As such, this would mean that the sole purpose is to make the financial statements look better, which is not an acceptable approach to selecting policies.
5. This is an example of a business transaction entered into for the sole purpose of making the financial statements show revenue on merchandise where it is unlikely that the risks and rewards of ownership have, in fact, passed to the other party. What would happen if the business owner's ultimate customer decided not to proceed with the purchase? Would the business owner have an agreement with the business associate that it would repurchase the goods? Who is insuring the goods? What is the nature of the "holding company"? Care should be taken to investigate whether all the revenue recognition criteria have actually been met.

PROBLEM 2-6 (Continued)

6. This represents an error in the application of GAAP. Under the economic entity and control principles, Maher Company does not have control over the investee and as such its assets and liabilities are not part of Maher's economic resources and obligations and would not be consolidated.

PROBLEM 2-7

1. Costs likely exceed the benefits. Information about competitors might be useful for benchmarking the company's results but if management does not have expertise in providing the information, it could lack neutrality and verifiability. In addition, it is likely very costly for management to gather sufficiently reliable information of this nature.
2. Costs likely exceed the benefits. While users of financial statements might benefit from receiving internal information, such as company plans and budgets, competitors might also be able to use this information to gain a competitive advantage relative to the disclosing company. Note, however, that this information would be useful to users.
3. Costs likely exceed the benefits. In order to produce forecasted financial statements, management would have to make numerous assumptions and estimates, which would be costly in terms of time and data collection. Because of the subjectivity involved, the forecasted statements would lack neutrality and verifiability, thereby detracting from any potential benefits. In addition, while management's forecasts of future profitability or balance sheet amounts could be of benefit, companies could be subject to shareholder lawsuits if the amounts in the forecasted statements are not realized.
4. Costs likely exceed the benefits. It would be excessively costly for companies to gather and report information that is not used in managing the business.
5. Benefits likely exceed costs. Flexible reporting allows companies to "fine-tune" their financial reporting to meet the information needs of its varied users. In this way, they can avoid the cost of providing information that is not demanded by its users.

PROBLEM 2-8

Dear Uncle Warren,

I received the information on Jingle Corp. and appreciate your interest in sharing this venture with me. However, I think that basing an investment decision on these financial statements would be unwise because they are neither relevant nor representationally faithful.

One of the most important characteristics of accounting information is that it is relevant, i.e., it will make a difference in the users' decision. One element of relevance is predictive value and Jingle's accounting information proves irrelevant in this regard. Shown without reference to other years' profitability, it cannot help me predict future profitability because I cannot see any trends developing. Closely related to predictive value is feedback value. These financial statements do not provide feedback on any strategies, which the company may have used to increase profits.

These financial statements are also not representationally faithful. The accounting information must reflect the underlying substance of the events and transactions. As a financial statement user, I should be able to see what lies beneath the numbers and feel comfortable that it is complete, neutral and free from bias or error.

Another quality of decision-useful financial information is that it should be timely. Because Jingle's financial statements are a year old, they have lost their ability to influence my decision: a lot could have changed in that one year. The information must be verifiable by several independent parties. Because no independent auditor has verified these amounts, there is no way of knowing whether or not they are represented faithfully. For instance, I would like to believe that this company earned \$2,424,240, and that it had a very favourable debt-to-equity ratio. However, unaudited financial statements do not give me any reasonable assurance about these claims. Financial statements prepared by the company should be of sufficient quality and clarity so that I can understand the item's significance.

Finally, the statements are missing additional information that is normally available through note disclosures. Without these note disclosures, I cannot assess if the accounting policies followed are in accordance with GAAP, or their impact on the information presented.

Finally, the fact that Mrs. Jingle herself prepared these statements indicates a lack of neutrality. Because she is not a disinterested third party, I cannot be sure that she did not prepare the financial statements in favour of her husband's business.

PROBLEM 2-8 (Continued)

Under the circumstances, I do not wish to invest in the Jingle bonds and would caution you against doing so. Before you make a decision in this matter, please call me.

Sincerely,

Your Nephew

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text. Note that the first few chapters of the text lay the foundation for financial reporting decision-making. Therefore the cases in the first few chapters (1-5) are shorter with less depth. As such, they may not cover all aspects of a full-blown case analysis. The solutions to these cases are based on the conceptual framework and not a specific GAAP such as ASPE or IFRS.

CA 2-1 BRE-X

Overview

Given that the company was in the mining industry and had recently suggested that it had discovered a large gold deposit in Indonesia, much of the value of the shares would be attributable to the potential value of the unmined gold. The main asset on the balance sheet would have related to the property. Many investors relied on the existence of potential gold and subsequently lost a lot of money.

Management may have had a bias to delay making the negative findings public in hopes that the samples were not representative of the extent of the rest of the gold deposits.

GAAP standards were a constraint given that the company was a public company with shares traded on the Toronto and Montreal exchanges in Canada and on the NASDAQ in the U.S.

Analysis and Recommendations

The issue is one of asset impairment (measurement). The company did not write the assets down nor disclose the problem in the notes to the financial statements.

NB: The case uses the conceptual framework only to analyze the issues (as opposed to any particular specific GAAP body of knowledge such as IFRS).

CA 2-1 (Continued)

Write assets down/disclose	Do nothing
- The main asset on the balance sheet would be for the property. Therefore this was a material issue. - Note that the full value of the gold would not be capitalized on the balance sheet – only the costs to develop the mines. Nonetheless, even the future benefit of those values would be in question if there was very little or no gold. - Management knew or should have known that the gold discovery was driving the share value and therefore, this information was decision relevant. - The salting of the sample was a fraud – a deliberate intent to mislead. The information was therefore biased. - The full disclosure principle would dictate at least disclosing the problem as soon as it was discovered. - Other.	- Perhaps management felt that it was too early in the game to disclose the bad news i.e. they might have delayed disclosing the information in hopes of doing more exploration to substantiate the fact that gold did exist. There was significant uncertainty regarding whether there was a problem or not. - Given measurement uncertainty, it would have been difficult to measure the potential loss. - Sending a message without trying to explain the outcome might have panicked investors. - Other.

In conclusion, it is difficult to justify not at least disclosing the information since it was clearly a decision relevant to the investors.

CA 2-2 BENNETT ENVIRONMENTAL

Overview

The company is in the business of treating/neutralizing contaminated material. As such, it is at risk for potential claims against the company for environmental damage – either resulting from the treatment process or because the cleanup site was not properly cleaned. Because the company transports the contaminated material, there is a risk of spillage.

Investors will be interested in how the company is managing these risks and will be looking for any hints of potential related losses. The current loss of \$9.3 million and the accumulated deficit point to possible financial difficulties.

The company is a public company (shares traded on the TSX) and therefore IFRS is a constraint (not given in the case, however, students should be able to look this up).

NB - Students may use the conceptual framework for the analysis.

Analysis and Recommendations

Issue: How to treat the transportations costs

Expense	Capitalize
- These costs do not add any value to the asset and should therefore be expensed. - When the amount is reimbursed, ensure that it is credited to the expense line. - Other.	- These costs are part of the costs to get the “raw materials” in place and ready for processing. - They therefore make up part of the cost of the asset. Since they are reimbursable, they represent a future benefit through future cash flows. - Because of the unique business model, it makes sense to capitalize these costs. - Other.

Since the costs are reimbursable they should be capitalized as a type of inventory. This is very similar to purchasing goods for a customer where the sale will occur in a future period. In both cases, the future benefits are the expected future cash receipts as the service/product sale is completed. If service revenue is recognized (accrued) instead as the service is performed, then the costs incurred for transportation should be expensed to match them with the associated revenue.

CA 2-2 (CONTINUED)

Issue: Lawsuit

Recognize a liability/disclose	Do not recognize/disclose
- The entity should recognize a liability for the lawsuit if the company's lawyers feel that a liability exists. All information would have to be taken into account including whether they did indeed commit fraud, and if so, the potential settlement. - The company would assess whether a settlement is probable and measurable. - Relevant information – most users would likely want to know if fraud had been committed. - Other.	- Disclosure/recognition might prejudice the case. - At year-end, too much measurement uncertainty – thus information not meaningful (would not add value since so much uncertainty). - Since the proceedings have been halted, this adds additional uncertainty. - Other.

CA 2-3 TIMBER COMPANY

Overview

Since this is a public company, IFRS would be a constraint. As noted above, the analysis may be prepared using the conceptual framework (only) without reference to specific IFRS.

The nature of the industry is such that the main asset is the property including the trees which are still growing. Much of this value will be unrecognized since the asset recognized on the books would include the price to purchase the land (if owned) plus perhaps any costs directly related to getting the trees ready for sale (growing costs and labour). This issue is one of measurement or valuation of the assets. Thus the main asset on the balance sheet may be understated – even though there may be a bias for management to reflect the true value.

Management may be looking to make the statements look better to compensate for this.

CA 2-3 (Continued)

Analysis and Recommendation

Value the property at laid down cost	Value the property at fair value
- The historical cost principle supports valuing the property at the laid down cost (i.e. the acquisition cost) plus any costs incurred to get the asset ready for the intended use. - The trees will grow and therefore increase in value each year. They are similar to self-constructed assets and thus any costs incurred in “producing” the trees would be capitalized. This might include direct material (such as fertilizers) and direct labour (the labour costs to facilitate growth) and a reasonable allocation of overhead – all similar to inventory. - Costs such as pesticides etc. might be seen as maintenance costs rather than part of the cost of the asset since they must be incurred as part of the ongoing daily operations to maintain the value of the assets (rather than increasing the value). - The historical cost principle precludes measurement at selling price due to the measurement uncertainty associated with that value. - Lumber is a commodity and the price is affected by supply and demand. Wood may easily be damaged by infestations (and thus become worthless). Thus there is significant measurement uncertainty surrounding valuing the asset at other than historical cost.	- The main argument for fair value accounting rests with providing relevant information. - Without this information, the investor is left guessing at the value. Thus the financial statements do not provide useful information. - It is easier for management to assess the value since they have more information about the company (than the investor who is really an outsider to the company and has little additional details about the company other than what they are given by the company). - Companies know how many hectares of trees they have and also must be able to convert this to lumber yield based on history. Lumber costs are available. Thus the value is measurable if only within a range. - Other.

CA 2-3 (Continued)

- A reciprocal exchange with an outside party will not occur until the trees are sold. At this point, the measurement uncertainty is resolved. - Other.	

In conclusion, given the measurement uncertainty, the trees should be reported at cost. In order to provide more meaningful information, the company may always provide detailed additional note disclosures.

[On the other hand, students should note that IAS 41 deals with biological assets and requires fair value accounting where the activity is managed by the entity and fair values can be reliably measured. This is often the case in such an established industry. In general, the measurement uncertainty issue is resolved by increased disclosure requirements about how fair value measures are determined.]

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 2-1 (Time 20-25 minutes)

Purpose—to provide the student with the opportunity to comment on the purpose of the conceptual framework.

WA 2-2 (Time 25-35 minutes)

Purpose—to provide the student with some familiarity with the concepts of faithful representation, reliability, substance over form and conservatism and neutrality. The students are also asked to address what should be disclosed when there is a true and fair view override of an accounting standard as allowed under IAS 1.

WA 2-3 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to assess different points to report costs as expenses. Direct cause and effect, indirect cause and effect, and rational and systematic approaches are developed. Specifically, the students are to address also the issues of matching and the definition of an asset.

WA 2-4 (Time 15-20 minutes)

Purpose—to provide the student with the opportunity to use the fair value hierarchy. Five different situations are given where fair values have been used and the student is asked to assess what level and method has been used, and what disclosures should be provided by the reporting entity to assist the user.

WA 2-5 (Time 10-15 minutes)

Purpose—to provide the student with the opportunity to apply the definition of a liability to different situations and to determine if a liability exists.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 2-1

A conceptual framework is like a constitution. Its objective is to provide a “coherent system of interrelated objectives and fundamentals that can lead to consistent standards and that prescribes the nature, function, and limits of financial accounting and financial statements.”

A conceptual framework is necessary so that standard setting is useful, i.e., standard setting should build on and relate to an established body of concepts and objectives. A well-developed conceptual framework should enable the AcSB and IASB to issue more useful and consistent standards in the future.

Specific benefits that may arise are:

1. A coherent set of standards and rules should result.
2. New and emerging practical problems should be more quickly solvable by reference to an existing framework.
3. It should increase financial statement users' understanding of and confidence in financial reporting.
4. It should enhance comparability among companies' financial statements.
5. It should help determine the bounds for judgement in preparing financial statements.
6. It should provide guidance to the body responsible for establishing accounting standards.

Having a separate conceptual framework for ASPE and for IFRS better addresses the factors that are most relevant to the companies applying the different standards. Since the reporting needs differ greatly between public companies and private companies, it is appropriate that a different conceptual framework be used to structure the reporting standards for each.

WA 2-2

- (a) “Faithful representation” means the financial statements reflect the economic substance of transactions that have occurred. In doing so, the statements must be complete, neutral and free of error. The Board found that the word “reliability” had different meanings with users. Some used the term to mean *verifiability* or *free from error*. Some used it to mean “faithful presentation combined with neutrality”. Others used the term to mean *precision*. In addition, the Board had found historically that when new standards were proposed, the criticisms received always referred to reliability. In some cases, critics stated that the new proposal would not result in reliable financial statements. And in other cases, for exactly the same proposals, other comments supported the proposals because it was felt that they did result in reliable information. However, never did any groups define what was meant by reliable. Therefore, the Board determined that they had to come up with a different term to better convey this. So the term itself was changed to be “faithful representation.”
- (b) “Substance over form” is part of the definition of representing transactions based on their economic substance. The discussion centres on “legal” form versus the nature or substance of the transactions. Examples of this might include:
- a. On the sale of a product, legal title is transferred, but the entity is still receiving royalties related to this asset. In substance, the future economic benefits have not been transferred, even though title has legally been transferred. In substance, this would not be recorded as a sale.
 - b. The entity issues preferred shares with a legal form of equity. However, the shares have a mandatory redemption, requiring the company to redeem the shares in five years at a fixed amount. In substance, these shares are a liability for the company.

WA 2-2 (continued)

- (c) In preparing financial information there is a significant use of estimates that must be made. Historically, making conservative estimates were meant to ensure that the financial statements were not overly optimistic or biased by management. This was seen as a virtue, and desirable. Conservatism would result in understatement of assets, overstatement of liabilities, and understatement of net earnings. This practice would provide a safety margin for creditors. However, in the future, as these estimates reversed, income would be overstated. Conservatism would always result in biased statements reflecting an understatement of net assets or net earnings. This violates the concept of “neutrality” which means that the financial statements are free from bias of any sort. Neutrality implies that when there is uncertainty, the preparer must search for additional information to reduce the uncertainty, reflect the uncertainty using a range of probabilities and expectations, or use the midpoint in a range of probabilities.
- (d) Certain transactions may be unique for a company. Being able to override a standard that ends up misrepresenting the reporting of a transaction allows the entity to ensure that the true economic substance of the transaction is properly reflected in the financial statements – which would result in faithful representation. However, this violates comparability of information between companies since different companies would report similar transactions in different manners. It might also violate understandability, if users are expecting a certain type of reporting and are given another by the entity. This could lead to confusion by the user. As a user then, the following information should be disclosed:
- a. The nature of the standard that is being overridden
 - b. Why the company believes that a different presentation will more faithfully represent the economic substance of the transaction
 - c. How is the company different from peers in the industry, that have been able to follow the appropriate standard
 - d. What is the impact on the financial statements – specifically on assets, liabilities, revenue and expenses? In particular, what would the standard have required, and what how has the company presented the information. What are the differences?

WA 2-3

- a) The definition of an expense is a “decrease in economic resources, either by outflows or reductions of assets or the incurrence of liabilities, which result from an entity’s **ordinary revenue-generating activities**” .Some costs are recognized as expenses on the basis of a presumed direct association with specific revenue. This presumed direct association has been identified both as "associating cause and effect" and as the practice of "matching". This practice of matching dictates that expenses are matched with revenues they help produce.

Direct cause-and-effect relationships can seldom be conclusively demonstrated, but many costs appear to be related to particular revenue, and recognizing them as expenses accompanies recognition of the revenue. Generally, matching requires that the revenue recognized and the expenses incurred to produce the revenue be given concurrent periodic recognition in the accounting records. GAAP requires the use of a rational and systematic allocation policy to approximate the asset's contribution to revenue. Thus, the practice of matching is a recognition of the cause-and-effect relationship that exists between money spent to earn revenues (expenses) and revenues themselves.

An example of matching is the allocation of the cost of a long-lived asset over the accounting periods during which the asset helps generate revenue (its useful life).

- b) Matching has historically been an important concept in determining when an expense is recognized in the income statement. Historically, accounting standards considered the measurement of net earnings more important than the balance sheet's recognition of assets and liabilities. There has now been a shift to ensure expenses cannot be represented as assets unless these deferred costs meet the definition of an asset (unless specifically allowed by a standard). The definition of an asset is that the costs incurred must represent present economic resources to which the entity has the right to access, where others do not. Examples of where the matching principles would defer costs that would not meet this definition would be:
- Pre-opening costs – A company requires time to set up and organize its business during which it does not earn any revenue. The costs to initially set up can be argued to be incurred to generate future revenues. Therefore, matching would allow the deferral of costs and then these costs would be expensed over the next 2 or three years. However, there is no direct link between the

WA 2-3 (Continued)

costs incurred and the right to economic benefits to flow to the organization.

- Advertising and promotion – A company launches a new product and spends a three times the normal amount to promote the product. The company argues that the promotional costs will generate sales for many years to come. Matching would allow the deferral of costs and then expensing these costs over the future revenues generated by the new product. However, the promotional costs do not meet the definition of an asset and would be required to be expensed immediately.

The definition of an asset should take precedence to ensure that the balance sheet assets are properly reflected.

- (c) Some costs are assigned as expenses to the current accounting period because
1. their incurrence during the period provides no discernible future benefits;
 2. they are measures of assets recorded in previous periods from which no future benefits are expected or can be discerned;
 3. they must be incurred each accounting year, and no build-up of expected future benefits occurs;
 4. by their nature they relate to current revenues even though they cannot be directly associated with any specific revenues;
 5. the amount of cost to be deferred can be measured only in an arbitrary manner or great uncertainty exists regarding the realization of future benefits, or both;
 6. uncertainty exists regarding whether allocating them to current and future periods will serve any useful purpose.

Thus, many costs are called "period costs" and are treated as expenses in the period incurred because they have neither a direct relationship with revenue earned nor can their occurrence be directly shown to give rise to an asset. Examples of costs treated as period expenses would include officers' salaries, advertising, research and development, and auditors' fees.

WA 2-3 (Continued)

- (d) A cost should be capitalized, that is, treated as a measure of an asset when it meets the definition of an asset – that is, at the reporting date, it is a resource controlled by the entity as a result of past transactions or events and from which the entity expects to receive future economic benefits. The important idea here is that the incurrence of the cost has resulted in the acquisition of an asset (has future economic benefit). If a cost is incurred that resulted in the acquisition of an asset from which benefits are not expected beyond the current period, the cost must be expensed as a measure of the service potential that expired in producing the current period's revenues. Not only should the incurrence of the cost result in the acquisition of an asset from which future economic benefits are expected, but also the cost should meet the definition of an asset. Examples of costs that should be treated as measures of assets are the costs of merchandise on hand at the end of an accounting period, costs of insurance coverage relating to future periods, and the cost of self-constructed plant or equipment.
- (e) In the absence of a direct basis for associating asset cost with revenue and if the asset provides benefits for two or more accounting periods, its cost should be allocated to these periods (as an expense) in a systematic and rational manner. Thus, when it is impractical, or impossible, to find a close cause-and-effect relationship between cost and revenue, this relationship is often assumed to exist. Therefore, the asset cost is allocated to the accounting periods by some rational and systematic method. The allocation method used should appear reasonable to an unbiased observer and should be followed consistently from period to period. Examples of systematic and rational allocation of asset cost would include amortization of capital assets, and allocation of rent and insurance to the time periods they cover.
- (f) A cost should be treated as a loss when no economic benefit results. The matching of losses to specific revenue should not be attempted because, by definition, they are expired service potentials not related to revenue produced. That is, losses result from events that are not anticipated as necessary in the process of producing revenue.

There is no simple way of identifying a loss because ascertaining whether a cost should be a loss is often a matter of judgement. The accounting distinction between an asset, expense and loss, is not clear-cut. For example, an expense is usually voluntary, planned, and expected as necessary in the generation of revenue. But a loss is a measure of the service potential expired that is considered abnormal, unnecessary, unanticipated, and possibly nonrecurring and is usually not taken into direct consideration in planning the size of the revenue stream.

WA 2-4

In all cases, the company should disclose the method used to prepare the valuation. The discussion for each situation along with the additional disclosures required is as follows:

- (a) The independent appraisal of the investment property would be level 2 – market model. The appraiser is looking at current market prices for similar buildings. The notes should disclose that an independent appraiser has been hired and his credentials.
- (b) The royalties based approach would be level 3 since there are many inputs that are required. The cost model approach is being used since it is the cost of what a similar asset would have been. Additional disclosure would be the type of model used, how the sales were forecasted and the rates of growth used.
- (c) The prices for publicly traded shares are readily observable and no adjustments are required. This is level 1, market based method and no additional disclosure would be required.
- (d) The value of the equipment is based on the cost model, level 2, since it was determined using costs of similar machines using inputs from the supplier for replacement equipment. Any adjustments made to the price would be noted.
- (e) The brand names' valuation requires a lot of management inputs which makes it a level 3. In this case it is an income model that has been used. All of the significant inputs such as sales growth rates, terminal growth rates, margins and discount rate should be disclosed. In addition, the company should provide disclosure about what management based their input assumptions on - ie. market data? Finally, some sensitivity analysis would be useful such as explaining how a 1% change in sales growth rate or discount rate estimates would affect the final valuation.

WA 2-5

- a) Country X – At the reporting date, Silverstrike has dug 4 mine shafts of 17 metres, which is greater than the 15 metres specified in the regulations. The government of Country X can enforce this law and force Silverstrike to either pay the fine or fill in the shafts. Silverstrike will have an economic obligation in that it will have to either pay the fines or pay for the costs to fill the shafts. So there is an enforceable economic obligation. However is it a present obligation? Silverstrike only needs to pay when the mining operations cease, over which they have control – this could either be as early as next year, or when all the silver is gone and the company closes the mining operation, which is predicted to be in 25 years. However, although the timing of when the obligation must be paid is uncertain, the costs will eventually have to be paid, since the life of the mine is not indefinite. Therefore, there is a present obligation and this is a liability. In determining how much to recognize, the company would have to determine based on probabilities as to when the costs would be incurred and the amount to recognize.

Country Y – the situation with Country Y is slightly different. In this case, the company is held by a contract which is legally enforceable. However, the company only has shafts of 10 metres and the contract come into effect when the shafts are 15 metres. Although they plan (and their intent) is to dig deeper to 17 metres (which is beyond the 15 metres), they have not yet done so. Consequently, there is no present obligation. On December 31, 2014, the government of Country Y cannot force Silverstrike to pay fines now or in the future. So there is no liability existing at this point in time. Even though it is highly probable (95%) the depth of the shafts will be more than the 15 metres in one year, this is not used to determine the definition of a liability. The definition specifically looks at the present obligation.

WA 2-5 (Continued)

- b) Is there a present economic obligation for Zion? The company has the ability to terminate the employee prior to the 15 year period, and if this happens, the company will not have to pay any benefits. In other words, there are no consequences for early termination. The employee has no ability to enforce the payment of the benefits if he leaves before the 15 years has passed. Therefore, there is no present enforceable obligation. Only once the 15 years has passed does the company have an obligation. So there is no liability at this time, with respect to this employee. Even though, if we used probabilities, the chances of the employee staying are very high, this does not represent a present obligation and therefore, no liability needs to be recognized.
- c) Beatonville Soccer Team has signed a contract, which is enforceable by Masonry. The Team has an obligation to ensure that Masonry's name is displayed on the recreation centre. If it does not, then the Team would either have to pay back a part of the \$2 million received, or pay a fee to break the contract in some manner. So there is an economic obligation that is legally enforceable. Finally, the obligation is a present obligation since it could right now be enforced by Masonry if the Team did not comply. Masonry has paid the fee and expects to see their name on the stadium for the next 8 years.

RESEARCH AND FINANCIAL ANALYSIS

RA 2-1 TECK RESOURCES LIMITED

Teck Resources Limited, formerly Teck Cominco Limited, December 31, 2011 financial statements were used.

- (a) Teck Cominco Limited recognizes revenue when price is reasonably determinable and the risks and rewards of ownership have passed to the customer. In the majority of sales of its metal concentrates, quoted market prices subsequent to the date of sale are used to determine pricing. Therefore, in these cases where there are variations in price there is the need for revenue adjustments. The primary method of revenue recognition is conservative since no revenue is recognized until title has passed. The sales contract method is more aggressive since revenue is recognized at an earlier point in the performance process. The receivable and revenue amount is adjusted to the forward commodity price each period reflecting changes in revenue on an ongoing basis.
- (b) Teck Cominco Limited's investments in associates are recorded at cost plus its share of earnings (less dividends received). The equity method is used to account for these investments. Other investments include available-for-sale instruments and marketable securities which are recorded at fair value (Note 12). Land is recorded at historical cost on the financial statements (Note 3). Another item measured at fair value is receivables which are reported at fair value each reporting period (Note 3).

RA 2-1 (Continued)

- (c) The restatement of the 2010 financial statements was required as part of the company's conversion to IFRS. The restatement resulted in a reduction of equity of \$147 million at December 31, 2010. Some of the pros of restating the 2010 financial statements under IFRS are that the information is more comparable with the current period financial statements since the same standards are used. Another pro to restating the financial statements for the previous year (2010) is that it gives the company the opportunity to recognize reversals of impairment loss, specifically a \$22 million impairment loss was reversed as a result of restatement under IFRS. Cons related to the restatements would be the time and expense required to make the IFRS adjustment and the reduction of comprehensive income by \$147 million under IFRS which investors may see as a sign the previous statements were misleading, or they might question the company's profitability if they do not fully understand all of the necessary adjustments.
- (d) When the company restated 2010 financial statements under IFRS there was a decrease in comprehensive income of \$147 million. This happened as a result of differences in old Canadian GAAP standards and IFRS where different measurement is required, resulting in some financial statement accounts adding to or reducing the comprehensive net income reported. The largest changes were to employee benefits (reduced by \$119 million), and income and resource taxes (reduced by \$51 million). The first adjustment relates to employee benefits actuarial gains and losses. Under Canadian GAAP, Teck recorded these as deferred and amortized them over the average remaining service life of related employees. Under IFRS, Teck recognizes actuarial gains and losses immediately through other comprehensive income and retained earnings. This resulted in a loss of \$119 million that was previously amortized to be recognized immediately.

RA 2-1 (Continued)

The adjustment for income and resource taxes relates to the Alaska Mining License Tax that was accounted for as an operating expense under Canadian GAAP but is recorded as a deferred tax liability under IFRS as it is considered a resource tax to be included in income tax. Another part of the income tax adjustment relates to uncertain tax positions which are recorded differently under IFRS as there is no specific standard relating to them items and they have been recorded using criteria in IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

RA 2-2 GOING CONCERN ISSUES

The following information is from a review of Note 4 of Air Canada's financial statements for the year ended December 31, 2011.

- a) The main accounting estimates and judgements disclosed by the company are employee future benefits, passenger revenues, depreciation/amortization period for long-lived assets, impairment considerations on long-lived assets, and maintenance provisions. Employee future benefits are estimated using actuarial valuations, the long-term nature of these valuations exposes the liability to uncertainty. Passenger revenue is estimated based on historical experience which could result in some differences from the recorded amount. Useful lives and expected residual values of long-lived assets are all estimated and could change based on usage or market factors. Impairment tests are subject to similar factors as the useful lives and residual values of fixed assets. Maintenance provisions are estimated using current costs and expected inflation and usage rates, both of which are subject to fluctuations.

- b) It is important that Air Canada disclose this information as any change in the assumptions made could impact the results of operations. Many of the assumptions could have a material effect on the financial statements which would alter the decisions of users of the statements. One example is that if passenger revenue is based on poor estimates that turn out to be significantly different than the actual revenue, investors would be misled and might have invested more in the company than they otherwise would choose to.

RA 2-2 (Continued)

(c) The value of the significant estimate accounts are as follows (in millions):

Net benefit obligation:	\$5,635
Passenger revenue:	\$10,208
Depreciation/amortization expense:	\$728
Maintenance provision:	\$548

Comparing the values above to Air Canada's net loss position of (\$249), it is clear that these are major accounts on the financial statements and changes in their value could greatly impact the financial results. Each account is greater than the net loss and would be very significant to users.

RA 2-3 RETRIEVAL OF INFORMATION ON PUBLIC COMPANY

Answers will vary by the article and the company selected.

RA 2-4 ARGUMENTS FOR AND AGAINST THE USE OF FAIR VALUES IN LIGHT OF THE FINANCIAL CRISIS

a) Using fair values means that assets are valued at what they could be sold for in an open market. When the changes in these fair values are reported in earnings, this causes net earnings to be volatile. As fair values increase, earnings will increase; and as fair values decline, earnings will decline.

b) Arguments against the use of fair values, particularly in a climate of financial crisis, are the following:

- The markets are not perfect, and therefore current fair values in the market may not truly represent the underlying value. This is particularly true in a recession, when the value of all assets is significantly reduced.
- Determining fair values in an inactive market is difficult or impossible.
- Many of these assets are not held to be sold, but are held for the long term until maturity (example mortgages) and therefore to report based on fair value causes erroneous and distorted results.
- Some argue that assets should not be valued based on fair values at what they could be sold for, but on how they perform in comparison to how the asset are expected to perform.
- Fair value accounting causes too much unrealized volatility in the earnings reported by companies when in reality these are only “paper” gains and losses.
- Many of these fair values are artificially low now and will recover in the future before the asset is sold. Consequently, why should a loss be reported, when this might not even occur?

c) The arguments for fair value accounting (and to counter the arguments above) are as follows:

- From a user's perspective, fair values provide more transparency – rather than hiding potential losses on investments, these are now highlighted. This allows users to gain a better understanding as to the health of the company.
- Users need unbiased, up-to-date information to make informed decisions. Fair values are not affected by accounting policies, when the assets were purchased, who owns the assets or what their intended use was. It allows better comparability across companies. In using the cost basis, the carrying amount of a reported asset will depend on the age of the asset, the depreciation policies and the impairment tests making comparisons difficult.

RA 2-4 (continued)

- If volatility results from using fair values, this is simply reflecting that there is volatility in the market. Why should companies be able to smooth out their reported earnings, when this is not happening in reality?
- Fair value estimations in an inactive market are difficult. However, there are several acceptable methods to determine fair values – and using observable market prices is only one. Other valuation techniques such as discounted cash flows are also acceptable and do not rely on observed market prices.
- In a survey of users, 79% of respondents indicated support for the use of fair values as it results in more transparency and a greater understanding of the risks a company faces and their impact.
- Volatility is not invented, nor did it cause the crisis. Using fair values simply reports what has happened from an economic perspective and all companies are impacted by economic events.
- The crisis was caused by bad lending, and how it gets reported only reflects the true economic impact of this.
- While it is true that fair values may be currently low and may recover in the future, there is no guarantee of this. The financial statements should reflect the current situation, not what might be probable in the future.

d) Yes, I believe that using fair values better represents economic reality, provides for more transparency and assists the user in understanding the risks associated with a company.

e) IFRS does allow for a greater use of fair values in financial statement presentation compared to Accounting Standards for Private Enterprises. One example is the revaluation model under IAS 16 which allows for the revaluation of property, plant & equipment at their fair value rather than at amortized cost. A similar option exists under IAS 40 which allows investment property to be measured at fair value. A third example of increased fair value reporting under IFRS is the treatment of Employee Future Benefits, where plan assets are required to be measured at fair value.

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CHAPTER 3

THE ACCOUNTING INFORMATION SYSTEM

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems
Transaction identification.	1, 3, 4, 5	1, 2, 3, 4, 5	13
Trial balance.		2, 3, 4, 13	1, 4, 5, 6, 12, 16
Adjusting entries and error corrections.	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	8, 9, 10, 11, 12, 13, 25, 27	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
Closing.	17, 18	14, 15, 16, 26	1, 4, 5, 6, 7, 8, 9, 10, 12, 13
Inventory and cost of goods sold.	17	17, 18, 19	15
Work sheet and/or financial statements.	13	14, 17, 18, 20, 21, 22, 23, 24	1, 2, 4, 5, 6, 7, 8, 9, 10
Comprehensive accounting cycle.			1, 6
Alternate treatment & adj.	6, 7, 8, 9, 15	6, 7, 9	17
Reversing entries.*	19	25, 26, 27	14, 15

*This topic is dealt with in Appendix 3A to the Chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E3-1	Transaction analysis—service company.	Simple	15-20
E3-2	Corrected trial balance.	Simple	10-15
E3-3	Corrected trial balance.	Simple	15-20
E3-4	Corrected trial balance.	Simple	15-20
E3-5	Transactions of a corporation including investment and dividend.	Moderate	20-25
E3-6	Alternate method of recording prepayments.	Moderate	20-25
E3-7	Alternate method of recording prepayments.	Moderate	20-25
E3-8	Adjusting entries.	Moderate	15-20
E3-9	Adjusting entries – both treatments.	Moderate	15-20
E3-10	Analyze adjusted data.	Complex	15-20
E3-11	Adjusting entries.	Moderate	10-15
E3-12	Adjusting entries.	Moderate	15-20
E3-13	Adjusting entries and trial balance.	Complex	25-30
E3-14	Closing entries.	Simple	10-15
E3-15	Closing entries.	Moderate	10-15
E3-16	Closing entries.	Moderate	15-20
E3-17	Calculate missing amounts.	Simple	10-15
E3-18	Find missing amounts—periodic.	Moderate	15-20
E3-19	Prepare cost of goods sold—periodic.	Moderate	10-15
E3-20	Completing work sheet.	Simple	10-15
E3-21	Work sheet preparation.	Moderate	15-20
E3-22	Work sheet and balance sheet presentation.	Moderate	20-25
E3-23	Work sheet and statement of financial position presentation.	Moderate	20-25
E3-24	Partial work sheet preparation.	Moderate	15-20
*E3-25	Prepare adjusting and reversing entries.	Moderate	15-20
*E3-26	Closing and reversing entries.	Simple	15-20
*E3-27	Adjusting and reversing entries.	Moderate	15-20

*This topic is dealt with in Appendix 3A to the Chapter.

ASSIGNMENT CHARACTERISTICS TABLE (CONTINUED)

P3-1	Transactions, financial statements—service company.	Moderate	35-40
P3-2	Adjusting entries and financial statements.	Moderate	35-40
P3-3	Prepare adjusting entries.	Moderate	25-30
P3-4	Prepare financial statements and closing entries.	Moderate	35-40
P3-5	Worksheet, balance sheet, adjusting and closing entries.	Moderate	40-50
P3-6	Worksheet and financial statements	Moderate	40-50
P3-7	Financial statements, adjusting and closing entries.	Moderate	40-50
P3-8	Adjusting entries.	Moderate	15-20
P3-9	Adjusting entries and financial statements.	Moderate	25-30
P3-10	Adjusting entries and financial statements.	Moderate	25-35
P3-11	Adjusting entries.	Moderate	25-30
P3-12	Adjusting and closing.	Moderate	30-40
P3-13	Adjusting and closing.	Moderate	30-35
P3-14	Adjusting and reversing entries.	Complex	30-35
P3-15	Adjusting and reversing entries.	Moderate	30-35
P3-16	Correction of errors.	Moderate	30-35
P3-17	Alternate method of recording prepayments and unearned revenue.	Moderate	15-20

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 3-1

1. (a) Temporary, (b) Revenue
2. (a) Temporary, (b) Loss
3. (a) Temporary, (b) Shareholders' equity
4. (a) Permanent, (b) Liability
5. (a) Permanent, (b) Asset
6. (a) Temporary, (b) Expense
7. (a) Permanent, (b) Shareholders' equity
8. (a) Permanent, (b) Contra-asset
9. (a) Permanent, (b) Asset
10. (a) Permanent, (b) Shareholders' equity
11. (a) Permanent, (b) Asset
12. (a) Temporary, (b) Gain

BRIEF EXERCISE 3-2

1. (a) Increase, (b) No change
2. (a) Increase, (b) Before closing, a balance would exist in this account; after closing, no balance would exist in this account.
3. (a) Decrease, (b) Before closing, a balance would exist in this account; after closing, no balance would exist in this account.
4. (a) Decrease, (b) Before closing, a balance would exist in this account (which would exclude income or loss and dividends declared for the period); after closing, the balance in this account would be increased or decreased by the amount of net income or net loss for the period and decreased by the amount of dividends declared during the period.
5. (a) Decrease, (b) No change.
6. (a) Increase, (b) Before closing, a balance would exist in this account; after closing, no balance would exist in this account.
7. (a) Decrease, (b) Before closing, a balance would exist in this account (which would exclude other comprehensive income or loss for the period); after closing, the balance in this account

BRIEF EXERCISE 3-2 (Continued)

would be increased or decreased by the amount of other comprehensive income or loss for the period.

BRIEF EXERCISE 3-3

1. (a) Assets decrease by \$200, Liabilities decrease by \$200
(b) Assets decrease by \$200, Liabilities decrease by \$200
2. (a) Assets increase by \$250, Shareholders' equity increases by \$250
(b) Assets increase by \$250, Gains increase by \$250
3. (a) Assets increase by \$100, Shareholders' equity increases by \$100
(b) Assets increase by \$100, Revenues increase by \$100
4. (a) Assets increase by \$1,000 (+1,500-500), Liabilities increase by \$1,000
(b) Assets increase by \$1,000 (+1,500-500), Liabilities increase by \$1,000
5. (a) Assets increase by \$150, Shareholders' equity increases by \$150
(b) Assets increase by \$150, Other Comprehensive Income increases by \$150
6. (a) Assets decrease by \$2,000, Liabilities decrease by \$2,000
(b) Assets decrease by \$2,000, Liabilities decrease by \$2,000

BRIEF EXERCISE 3-4

May	1	Cash.....	12,000	
		Common Shares.....		12,000
	3	Equipment.....	4,500	
		Accounts Payable.....		4,500
	13	Rent Expense.....	800	
		Cash		800
	21	Accounts Receivable.....	750	
		Service Revenue.....		750

BRIEF EXERCISE 3-5

Aug.	2	Cash.....	12,000	
		Equipment	2,500	
		Common Shares		14,500
	7	Supplies.....	600	
		Accounts Payable.....		600
	12	Cash.....	1,300	
		Accounts Receivable	670	
		Service Revenue.....		1,970
	15	Rent Expense	600	
		Cash.....		600
	19	Supplies Expense	330	
		Supplies		330

BRIEF EXERCISE 3-6

Treat expenditure as asset:

July	1	Prepaid Insurance.....	18,000	
		Cash.....		18,000
Dec.	31	Insurance Expense	3,000	
		Prepaid Insurance		3,000
		(\$18,000 x 1/3 x 1/2)		

Treat expenditure as expense:

July	1	Insurance Expense	18,000	
		Cash.....		18,000
Dec.	31	Prepaid Insurance.....	15,000	
		Insurance Expense		15,000
		(\$18,000 x 1/3 x 2.5)		

BRIEF EXERCISE 3-7

Treat cash receipt as liability:

July	1	Cash.....	18,000	
		Unearned Revenue		18,000
Dec.	31	Unearned Revenue	3,000	
		Insurance Revenue.....		3,000
		(\$18,000 x 1/3 x 1/2)		

Treat cash receipt as revenue:

July	1	Cash.....	18,000	
		Insurance Revenue.....		18,000
Dec.	31	Insurance Revenue	15,000	
		Unearned Revenue		15,000
		(\$18,000 x 1/3 x 2.5)		

BRIEF EXERCISE 3-8

Treat expenditure as asset:

Aug. 1	Prepaid Expenses	12,600	
	Cash.....		12,600
Dec. 31	Operating Expenses	2,625	
	Prepaid Expenses.....		2,625
	(\$12,600 x 5/24)		

Treat expenditure as expense:

Aug. 1	Operating Expenses	12,600	
	Cash.....		12,600
Dec. 31	Prepaid Expenses	9,975	
	Operating Expenses		9,975
	(\$12,600 x 19/24)		

BRIEF EXERCISE 3-9

Treat cash receipt as liability:

Sept. 1	Cash.....	12,000	
	Unearned Rent Revenue		12,000
Dec. 31	Unearned Rent Revenue.....	8,000	
	Rent Revenue.....		8,000
	(\$12,000 x 4/6)		

Treat cash receipt as revenue:

Sept. 1	Cash.....	12,000	
	Rent Revenue.....		12,000
Dec. 31	Rent Revenue.....	4,000	
	Unearned Rent Revenue		4,000
	(\$12,000 x 2/6)		

BRIEF EXERCISE 3-10

Dec.	31	Salaries and Wages Expense.....	20,000	
		Salaries and Wages Payable.....		20,000
		(\$40,000 x ½)		
Jan.	7	Salaries and Wages Payable.....	20,000	
		Salaries and Wages Expense.....	20,000	
		Cash.....		40,000

BRIEF EXERCISE 3-11

Dec.	31	Interest Expense	600	
		Interest Payable		600
		(20,000 X 12% X 3/12)		
June	1	Notes Payable	20,000	
		Interest Payable	600	
		Interest Expense	1,000	
		Cash		21,600

BRIEF EXERCISE 3-12

Dec.	31	Interest Receivable	600	
		Interest Income		600
	31	Accounts Receivable.....	1,800	
		Service Revenue.....		1,800
	31	Salaries and Wages Expense.....	1,200	
		Salaries and Wages Payable....		1,200
	31	Bad Debt Expense	900	
		Allowance for Doubtful		
		Accounts.....		900

BRIEF EXERCISE 3-13

Depreciation Expense	4,000	
Accumulated Depreciation–Equipment.....		4,000
Equipment.....	\$20,000	
Less: Accumulated Depreciation–Equipment...	<u>4,000</u>	\$16,000

BRIEF EXERCISE 3-14

On the balance sheet, the effects of the error are (1) the equipment account is overstated, (2) accumulated depreciation is overstated (if depreciation was recorded), and (3) retained earnings is overstated. On the income statement, (1) purchases and cost of goods sold are understated, (2) depreciation expense is overstated (if depreciation was recorded), and (3) net income is overstated.

BRIEF EXERCISE 3-15

(a)

1. May 1	Prepaid Rent	1,200	
	Cash		1,200
2. May 31	Rent Expense	1,200	
	Prepaid Rent.....		1,200

(b)

1. May 1	Rent Expense	1,200	
	Cash		1,200
2. May 31	No entry		

(c) The ending balances of each account are the same under both alternatives.

BRIEF EXERCISE 3-16

The formula to calculate the amount of depreciation for the year using straight-line depreciation is:

(Cost less residual value) divided by useful life X pro-rated period used in the fiscal year.

$$\begin{aligned}
 & \frac{\text{Cost of mower and accessories} - \text{zero}}{\text{Useful life}} \times \frac{6}{12} \\
 & = \frac{\$9,600}{8} \times \frac{6}{12} \\
 & = \$600
 \end{aligned}$$

BRIEF EXERCISE 3-17

Beginning inventory			\$ 76,000
Purchases		\$486,000	
Less: Purchase returns and allowances	\$5,800		
Purchase discounts	<u>5,000</u>	<u>10,800</u>	
Net purchases		475,200	
Add: Freight-in		<u>16,200</u>	
Cost of goods purchased			<u>491,400</u>
Cost of goods available for sale			567,400
Ending inventory			<u>69,500</u>
Cost of goods sold			<u>\$497,900</u>

BRIEF EXERCISE 3-18

Sales Revenue	928,900	
Interest Income.....	17,500	
Income Summary		946,400
Income Summary	590,300	
Cost of Goods Sold.....		406,200
Operating Expenses.....		129,000
Income Tax Expense.....		55,100
Income Summary	356,100	
Retained Earnings.....		356,100
Retained Earnings.....	15,900	
Dividends.....		15,900

*BRIEF EXERCISE 3-19

(a)	Salaries and Wages Payable	2,700	
	Salaries and Wages Expense.....		2,700
(b)	Salaries and Wages Expense	5,000	
	Cash		5,000
(c)	Salaries and Wages Payable	2,700	
	Salaries and Wages Expense	2,300	
	Cash		5,000

SOLUTIONS TO EXERCISES

EXERCISE 3-1 (15-20 minutes)

Apr.	2	Cash	15,000	
		Equipment.....	10,000	
		Owner's Capital.....		25,000
	2	No entry—not a transaction.		
	3	Supplies	1,200	
		Accounts Payable		1,200
	7	Rent Expense	750	
		Cash.....		750
	11	Accounts Receivable	1,500	
		Service Revenue		1,500
	12	Cash	4,200	
		Unearned Revenue		4,200
	17	Cash	2,900	
		Service Revenue		2,900
	21	Insurance Expense.....	180	
		Cash.....		180
	30	Salaries and Wages Expense	1,920	
		Cash.....		1,920
	30	Supplies Expense.....	220	
		Supplies.....		220
	30	Equipment.....	4,100	
		Owner's Capital.....		4,100

EXERCISE 3-2 (10-15 minutes)

MANY HAPPY RETURNS COMPANY Trial Balance April 30, 2014

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 4,800	
Accounts Receivable	3,290	
Prepaid Insurance (\$700 + \$200)	900	
Equipment	8,000	
Accounts Payable (\$4,500 – \$200)		\$ 4,300
Property Tax Payable		560
Owner's Capital (\$11,200 + \$1,500)		12,700
Owner's Drawings	1,500	
Service Revenue		8,860
Salaries and Wages Expense	4,200	
Advertising Expense (\$1,100 + \$300)	1,400	
Supplies Expense	1,330	
Property Tax Expense (\$800 + \$200)	<u>1,000</u>	
	<u>\$26,420</u>	<u>\$26,420</u>

EXERCISE 3-3 (15-20 minutes)

(a) The ledger accounts are reproduced below, and corrections are shown in the accounts.

Cash	
Bal.	3,238
(5)	1,800
(5)	1,800
Bal.	6,838

Accounts Payable	
Bal.	3,212
Bal.	3,212

Accounts Receivable			
Bal.	15,799	(5)	1,800
(3)	500	(5)	1,800
Bal.	12,699		

Common Shares	
Bal.	6,000
Bal.	6,000

Supplies	
Bal.	1,122
(2)	325
Bal.	1,447

Retained Earnings	
Bal.	13,185
Bal.	13,185

Equipment	
Bal.	9,650
(4)	1,200
Bal.	10,850

Service Revenue	
Bal.	10,722
(3)	500
Bal.	11,222

Acc. Depreciation - Equipment	
Bal.	1,250
Bal.	1,250

Office Expense	
Bal.	2,410
(2)	325
(4)	1,200
Bal.	885

Salaries and Wages Payable	
(1)	300
Bal.	850
Bal.	550

Salaries and Wages Expense	
Bal.	3,000
(1)	300
Bal.	2,700

EXERCISE 3-3 (Continued)

(b)

BLUES AROUND THE CORNER CORPORATION

Trial Balance (corrected)

April 30

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 6,838	
Accounts Receivable	12,699	
Supplies	1,447	
Equipment	10,850	
Accumulated Depreciation - Equipment		\$1,250
Accounts Payable		3,212
Salaries and Wages Payable		550
Common Shares		6,000
Retained Earnings		13,185
Service Revenue		11,222
Office Expense	885	
Salaries and Wages Expense	2,700	
	<u>\$35,419</u>	<u>\$35,419</u>

EXERCISE 3-4 (15-20 minutes)

**MIS-MATCH INC.
Trial Balance
July 31, 2014**

	<u>Debit</u>	<u>Credit</u>
Cash (\$2,870 + \$1,320 – \$2,125)	\$ 2,065	
Accounts Receivable (\$3,231 – \$1,320 + \$3,890)	5,801	
Supplies (\$800 + \$400 - \$725*)	475	
Equipment (\$3,800 + \$500)	4,300	
Accounts Payable (\$2,666 + \$500 + \$400 - \$2,125 + \$1,160)		\$ 2,601
Salaries and Wages Payable		670
Dividends Payable		575
Unearned Revenue (\$1,200 – \$825)		375
Common Shares		6,000
Retained Earnings		2,795
Dividends	575	
Service Revenue (\$2,380 + \$3,890 + \$825)		7,095
Salaries and Wages Expense (\$3,400 + \$670)	4,070	
Office Expense (\$940 + \$725* + \$1,160)	2,825	
	<u>\$20,111</u>	<u>\$20,111</u>

* (\$800 + \$400) - \$475 = \$725

EXERCISE 3-5 (20-25 minutes)

(a)

J1				
Date	Account Titles and Explanation	Ref.	Debit	Credit
Mar. 1	Cash Common Shares (Investment of cash in business)		80,000	80,000
3	Prepaid Rent Land Buildings Equipment Cash (Purchased Mickey Mickelson's GolfLand)		2,500 20,000 32,000 16,000	70,500
5	Advertising Expense Cash (Paid for open house)		6,800	6,800
6	Prepaid Insurance Cash (Paid for one-year insurance policy)		2,400	2,400
10	Equipment Accounts Payable (Purchased equipment on account)		5,500	5,500
18	Accounts Receivable Service Revenue (Billed customers for services performed)		3,700	3,700
25	Dividends Cash (Declared and paid a \$1,500 cash dividend)		1,500	1,500
30	Salaries and Wages Expense Cash (Paid salaries and wages expense)		1,900	1,900
30	Prepaid Rent Cash (Paid April rent)		2,500	2,500
31	Cash Unearned Revenue (Received cash for April tournament)		750	750

* (\$800 + \$400) - \$475 = \$725

EXERCISE 3-5 (Continued)

(b) Woods should record the following adjusting entries before preparing financial statements for the month of March:

1. Depreciation expense related to the building, equipment, and golf equipment.
2. Insurance expense related to the one-year insurance policy paid for on March 6.
3. Bad debt expense related to the accounts receivable.
4. Rent expense for the month of March.

EXERCISE 3-6 (20-25 minutes)

(a)	Jan. 2	Cash.....	11,100	
		Service Revenue.....		11,100
	2	Insurance Expense	3,600	
		Cash		3,600
	10	Supplies Expense	5,700	
		Cash		5,700
(b)	Jan. 31	Prepaid Insurance.....	3,300	
		Insurance Expense.....		3,300
		(\$3,600 X 11/12 months)		
	31	Supplies	2,800	
		Supplies Expense.....		2,800
	31	Service Revenue	7,600	
		Unearned Revenue		7,600
		(\$11,100 - \$3,500)		

EXERCISE 3-6 (Continued)

(a), (b) and (c)

Insurance Expense				Supplies Expense			
Jan. 2	3,600	Jan. 31	3,300	Jan. 10	5,700	Jan. 31	2,800
Bal.	300			Bal.	2,900		

Cash				Service Revenue			
Jan.2	11,100	Jan. 2	3,600	Jan. 31	7,600	Jan. 2	11,100
		Jan. 10	5,700				
Bal.	1,800					Bal.	3,500

Prepaid Insurance		Supplies	
Jan.31	3,300	Jan. 31	2,800

Unearned Revenue	
Jan.31	7,600

(d) Sugarland's January 31 financial statements would be the same if Sugarland records prepayments by debiting an asset and crediting a liability when amounts are paid or received in cash, instead of debiting an expense and crediting revenue when amounts are paid or received in cash. This is because under both methods, prior to preparation of financial statements, adjusting entries would be recorded to adjust accounts to their correct balance on January 31.

EXERCISE 3-7 (20-25 minutes)

(a) May 1	Insurance Expense	9,600	
	Cash		9,600
Oct. 1	Rent Expense	9,200	
	Cash		9,200
Oct. 15	Advertising Expense	9,000	
	Cash		9,000
Dec. 1	Legal Expense	13,500	
	Cash		13,500
Various	Cash	1,500	
	Sales Revenue		1,500
(c) Dec. 31	Prepaid Insurance	3,200	
	Insurance Expense		3,200
	(\$9,600 X 4/12 = \$3,200)		
Dec. 31	Prepaid Rent	3,680	
	Rent Expense		3,680
	(\$9,200 X 2/5 = \$3,680)		
Dec. 31	Prepaid Advertising	4,500	
	Advertising Expense		4,500
	(\$9,000 X 18/36 = \$4,500)		
Dec. 31	Prepaid Expenses	9,000	
	Legal Expense		9,000
	(\$13,500 X 2/3)		
Dec. 31	Sales Revenue	475	
	Unearned Revenue		475

EXERCISE 3-7 (Continued)

(b) and (d)

Prepaid Insurance		
Dec 31	3,200	
Insurance Expense		
May 1	9,600	Dec. 31 3,200
Bal.	6,400	
Prepaid Rent		
Dec.31	3,680	
Rent Expense		
Oct. 1	9,200	Dec. 31 3,680
Bal.	5,520	
Prepaid Expenses		
Dec 31	9,000	
Bal.	9,000	
Advertising Expense		
Oct 15	9,000	Dec. 31 4,500
Bal.	4,500	
Prepaid Advertising		
Dec 31	4,500	
Bal.	4,500	
Legal Expense		
Dec 1	13,500	Dec. 31 9,000
Bal.	4,500	
Sales Revenue		
Dec.31	475	Various 1,500
		Bal. 1,025

- (e) If Black-Eyed Pears decided to record initial payments of prepaid costs as assets and unearned revenues as liabilities, the required adjusting entries at December 31, 2014 would be different, but the ending account balances would remain the same. This is because adjusting entries are recorded to adjust accounts to their correct balance, prior to preparation of financial statements.

EXERCISE 3-8 (10-15 minutes)

(a)

1.	Depreciation Expense	1,050	
	Accumulated Depreciation–		
	Equipment.....		1,050
	(\$350 X 3)		
2.	Unearned Rent Revenue.....	4,650	
	Rent Revenue.....		4,650
	(\$9,300 / 2)		
3.	Interest Expense	300	
	Interest Payable		300
4.	Supplies Expense	1,850	
	Supplies		1,850
	(\$2,800 – \$950)		
5.	Insurance Expense	900	
	Prepaid Insurance		900
	(\$300 X 3)		

(b) Based on interest expense of \$300 for the quarter ended March 31, interest is \$100 per month or 0.5% of the notes payable. $0.5\% \times 12 \text{ months} = 6\%$ interest per year.

EXERCISE 3-9 (15-20 minutes)

(a)

1.	Accounts Receivable	6,000	
	Service Revenue		6,000
2.	Operating Expenses.....	60	
	Accounts Payable.....		60
	(\$720 / 12)		
3.	Depreciation Expense	350	
	Accumulated Depreciation– Equipment		350
	Interest Expense.....	50	
	Interest Payable.....		50
4.	Insurance Expense.....	1,000	
	Prepaid Insurance		1,000
	(\$12,000 / 12)		
5.	Supplies Expense.....	500	
	Supplies		500

(b) Entries 1, 2 and 3 would be the same as in (a) above.

4.	Prepaid Insurance	11,000	
	Insurance Expense.....		11,000
5.	Supplies	3,300	
	Supplies Expense		3,300

EXERCISE 3-10 (15-20 minutes)

(a) Ending balance of supplies	\$600
Add: Adjusting entry	950
Deduct: Purchases	<u>650</u>
Beginning balance of supplies	<u>900</u>

(b) Total annual insurance	\$28,800	(\$2,400 X 12)

Present prepaid balance 2,400

The policy was purchased eleven months ago (March 1, 2013)

- (c) The entry in January to record salary and wages expense was:

Salaries and Wages Expense	1,800	
Salaries and Wages Payable	700	
Cash		2,500

The "T" account for salaries payable is

Salaries and Wages Payable			
Paid	700	Beg. Bal.	?
January			
		End Bal.	800

The beginning balance is therefore:

Ending balance of salaries and wages payable	\$ 800
Plus: Reduction of salaries and wages payable	<u>700</u>
Beginning balance of salaries and wages payable	<u>\$1,500</u>

EXERCISE 3-10 (Continued)

(d) Service revenue	\$3,000
Cash received in January	<u>1,600</u>
Decrease in unearned revenue	<u>\$1,400</u>
Ending unearned revenue January 31, 2014	\$1,000
Plus: decrease in unearned revenue	<u>1,400</u>
Beg. unearned revenue December 31, 2013	<u>\$2,400</u>

EXERCISE 3-11 (10-15 minutes)

- August 31, 2014**

Salaries and Wages Expense.....	6,000	
Salaries and Wages Payable.....		6,000
(To record salaries and wages payable at 8/31)		
- August 31, 2014**

Utilities Expenses	900	
Accounts Payable.....		900
(To record utility expense for August)		
- August 31, 2014**

Interest Receivable (\$60,000 x 3% x 1/12) ...	150	
Interest Income		150
(To record interest income for August)		
- August 31, 2014**

Prepaid Rent.....	1,200	
Rent Expense.....		1,200
(To record rent payment for September)		

EXERCISE 3-12 (15-20 minutes)

(a)	08/15	Salaries and Wages Expense	800	
		Cash		800
		(To record payment of August 15 payroll)		
	08/16	Fair Value-OCI Investments...	6,000	
		Cash		6,000
		(To record purchase of FV- OCI Investments)		
	08/17	Accounts Receivable	2,400	
		Service Revenue		2,400
		(To record service performed for which payment has not been received yet)		
	08/20	Cash	650	
		Unearned Revenue		650
		(To record receipt of cash for services not performed yet)		

EXERCISE 3-12 (Continued)

(b)	08/31	Supplies Expense	470	
		Supplies.....		470
		(To record the use of supplies during August)		
	08/31	Accounts Receivable	1,650	
		Service Revenue		1,650
		(To record revenue for service performed)		
	08/31	Investment Income or Loss	800	
		Fair Value-NI Investments..		800
		(To record holding loss on FV-NI Investments)		
	08/31	Fair Value-OCI Investments.....	720	
		Unrealized Gain or Loss - OCI.....		720
		(To record holding gain on FV-OCI Investments)		
	08/31	Salaries and Wages Expense	600	
		Salaries and Wages Payable...		600
		(To record liability for payroll)		
	08/31	Unearned Revenue.....	400	
		Service Revenue		400
		(To reduce Unearned Revenue account for services performed)		

EXERCISE 3-13 (25-30 minutes)

(a)	1. Rent Expense (\$3,500 x 1/2)	1,750	
	 Prepaid Rent.....		1,750
	2. Supplies Expense (\$1,800 – \$650).....	1,150	
	 Supplies.....		1,150
	3. Depreciation Expense	1,278	
	 Accumulated Depreciation—		
	 Buildings		1,278
	 (\$142,000 – \$14,200 = \$127,800;		
	 \$127,800 / 25 = \$5,112 per		
	 year; \$5,112 x 3/12 = \$1,278)		
	 Depreciation Expense	360	
	 Accumulated Depreciation—		
	 Equipment		360
	 (\$16,000 – \$1,600 = \$14,400;		
	 \$14,400 / 10 = \$1,440;		
	 \$1,440 x 3/12 = \$360)		
	4. Rent Revenue	8,000	
	 Unearned Rent Revenue.....		8,000
	Unearned Rent Revenue	2,300	
	 Rent Revenue		2,300
	5. Salaries and Wages Expense	375	
	 Salaries and Wages Payable		375
	6. Accounts Receivable	800	
	 Rent Revenue		800
	7. Interest Expense	1,540	
	 Interest Payable		1,540
	 [((\$77,000 x 8%) x 3/12)]		

EXERCISE 3-13 (Continued)

HANNA RESORT LIMITED

Adjusted Trial Balance

August 31, 2014

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 6,700	
Accounts Receivable	800	
Prepaid Rent (\$3,500 – \$1,750)	1,750	
Supplies (\$1,800 – \$1,150)	650	
Land	20,000	
Buildings	142,000	
Accumulated Depreciation—Buildings (\$20,448 + \$1,278)		\$ 21,726
Equipment	16,000	
Accumulated Depreciation—Equipment (\$4,320 + \$360)		4,680
Accounts Payable		4,800
Unearned Rent Revenue (\$4,600 + \$8,000 – \$2,300)		10,300
Salaries and Wages Payable		375
Interest Payable		1,540
Notes Payable		77,000
Common Shares		81,000
Retained Earnings		4,680
Dividends	5,000	
Rent Revenue (\$68,002 - \$8,000 + \$2,300 + \$800)		63,102
Salaries and Wages Expense (\$43,200 + \$375)	43,575	
Utilities Expense	9,200	
Rent Expense (\$12,250 + \$1,750)	14,000	
Maintenance and Repairs Expense	3,600	
Supplies Expense	1,150	
Depreciation Expense (\$1,278 + \$360)	1,638	
Interest Expense (\$1,600 + \$1,540)	3,140	
	<u>\$269,203</u>	<u>\$269,203</u>

EXERCISE 3-14 (10-15 minutes)

(a)	Sales revenue		\$1,250,000
	Less: Sales returns and allowances	\$ 4,000	
	Sales discounts	<u>15,000</u>	<u>19,000</u>
	Net sales revenue		<u><u>\$1,231,000</u></u>

(b)	Sales Revenue	1,250,000	
	Income Summary.....		1,250,000
	Income Summary.....	19,000	
	Sales Returns and Allowances...		4,000
	Sales Discounts.....		15,000

EXERCISE 3-15 (10-15 minutes)

Sales Revenue	364,000	
Sales Returns and Allowances.....		1,000
Sales Discounts.....		7,000
Income Summary.....		356,000
Income Summary.....	334,400	
Cost of Goods Sold		228,000
Freight-out		9,000
Insurance Expense.....		12,000
Rent Expense.....		20,000
Salary and Wages Expense		61,000
Interest Expense		1,200
Advertising Expense.....		3,200
Income Summary.....	21,600	
Retained Earnings		21,600

(Note: These entries can be combined into one or two entries.)

EXERCISE 3-16 (10-15 minutes)

Sales Revenue	390,000	
Investment Income	3,000	
Cost of Goods Sold		222,700
Sales Returns and Allowances		2,000
Sales Discounts		5,000
Administrative Expenses		31,000
Income Tax Expense		30,000
Income Summary		102,300

(or)

Sales Revenue	390,000	
Investment Income	3,000	
Income Summary		393,000

Income Summary	290,700	
Cost of Goods Sold		222,700
Sales Returns and Allowances		2,000
Sales Discounts		5,000
Administrative Expenses		31,000
Income Tax Expense		30,000

Income Summary	102,300	
Retained Earnings		102,300

Accumulated Other Comprehensive Income	1,500	
Unrealized Gain or Loss-OCI		1,500

Retained Earnings	18,000	
Dividends		18,000

EXERCISE 3-17 (10-15 minutes)

(a)	Sales revenue	\$192,000
	*Sales returns and allowances	<u>(30,000)</u>
	Net sales revenue	<u>\$162,000</u>
(b)	Net sales revenue	\$162,000
	Cost of goods sold	<u>(55,500)</u>
	*Gross profit	<u>\$106,500</u>
(c)	Gross profit (b) above	\$106,500
	Operating expenses	<u>(35,000)</u>
	*Net income	<u>\$ 71,500</u>
(d)	*Sales revenue	\$81,000
	Sales returns and allowances	<u>(16,000)</u>
	Net sales revenue	<u>\$65,000</u>
(e)	Net sales revenue	\$65,000
	*Cost of goods sold	<u>(28,000)</u>
	Gross profit	<u>\$37,000</u>

EXERCISE 3-18 (20-25 minutes)

(a)	Sales revenue	\$98,000
	*Sales returns and allowances	<u>(24,000)</u>
	Net sales	<u>\$74,000</u>
(b)	Beginning inventory	\$21,000
	Purchases	63,000
	Purchase returns and allowances	<u>(6,000)</u>
	Cost of goods available for sale	78,000
	*Ending inventory	<u>(14,000)</u>
	Cost of goods sold	<u>\$64,000</u>
(c)	*Sales revenue	\$106,000
	Sales returns and allowances	<u>(5,000)</u>
	Net sales revenue	<u>\$101,000</u>
(d)	*Beginning inventory	\$ 25,000
	Purchases	105,000
	Purchase returns and allowances	<u>(10,000)</u>
	Cost of goods available for sale	120,000
	Ending inventory	<u>(48,000)</u>
	Cost of goods sold	<u>\$ 72,000</u>
(e)	Beginning inventory	\$ 44,000
	*Purchases	108,000
	Purchase returns and allowances	<u>(8,000)</u>
	Cost of goods available for sale	144,000
	Ending inventory	<u>(30,000)</u>
	Cost of goods sold (from (f) below)	<u>\$114,000</u>
(f)	Net sales revenue	\$132,000
	*Cost of goods sold	<u>(114,000)</u>
	Gross profit	<u>\$ 18,000</u>

EXERCISE 3-18 (Continued)

(g)	Sales revenue	\$120,000
	Sales returns and allowances	<u>(9,000)</u>
	*Net sales revenue	<u><u>\$111,000</u></u>
(h)	Beginning inventory	\$ 24,000
	Purchases	90,000
	*Purchase returns and allowances	<u>(14,000)</u>
	Cost of goods available for sale	100,000
	Ending inventory	<u>(28,000)</u>
	Cost of goods sold	<u><u>\$ 72,000</u></u>
(i)	Net sales revenue (from above)	\$111,000
	Cost of goods sold (from above)	<u>(72,000)</u>
	*Gross profit	<u><u>\$39,000</u></u>

EXERCISE 3-19 (10-15 minutes)

Inventory, September 1, 2013		\$ 22,800
Purchases	\$151,600	
Less: Purchase returns and allowances	<u>21,000</u>	
Net purchases	130,600	
Add: Freight-in	<u>4,000</u>	
Cost of goods purchased		<u>134,600</u>
Cost of goods available for sale		157,400
Inventory, August 31, 2014		<u>21,500</u>
Cost of goods sold		<u><u>\$135,900</u></u>

EXERCISE 3-20 (10-15 minutes)

<u>Accounts</u>	<u>Adjusted Trial Balance</u>		<u>Income Statement</u>		<u>Balance Sheet</u>	
	<u>Dr.</u>	<u>Cr.</u>	<u>Dr.</u>	<u>Cr.</u>	<u>Dr.</u>	<u>Cr.</u>
Cash	9,000				9,000	
Inventory	80,000				80,000	
Accounts Payable		26,000				26,000
Sales Revenue		480,000		480,000		
Sales Returns and Allowances	10,000		10,000			
Sales Discounts	5,000		5,000			
Cost of Goods Sold	290,000		290,000			
Salaries and Wages Expense	62,000		62,000			
Interest Income		12,000		12,000		

EXERCISE 3-21 (15-20 minutes)

AIRBOURNE TRAVEL INC.

Work Sheet

For the Month Ended March 31, 2014

Account Titles	Trial Balance		Adjustments		Adj. Trial Balance		Income Stat.		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	1,800				1,800				1,800	
Accounts Receivable	2,600				2,600				2,600	
Supplies	600		(a)	80	520				520	
Equipment	6,000				6,000				6,000	
Accumulated Depr. - Equipment		400	(b)	100		500				500
Accounts Payable		1,100				1,100				1,100
Unearned Revenue		500 (c)	400			100				100
Common Shares		6,400				6,400				6,400
Retained Earnings		600				600				600
Sales Revenue		2,600	(c)	400		3,000	3,000			
Salaries and Wages Expense	500		(d)	850	1,350		1,350			
Miscellaneous Exp.	100				100		100			
Totals	11,600	11,600								
Supplies Expense			(a)	80	80		80			
Depreciation Expense			(b)	100	100		100			
Salaries and Wages Payable				(d) 850		850				850
Totals			1,430	1,430	12,550	12,550	1,630	3,000	10,920	9,550
Net Income							1,370			1,370
Totals							3,000	3,000	10,920	10,920

- Key: (a) Record supplies expense
(b) Record depreciation expense
(c) Record ticket revenue earned
(d) Accrue salaries

EXERCISE 3-22 (20-25 minutes)

(a)

WEST KAYNE CONSULTING Work Sheet (Partial) For the Month Ended April 30, 2014

Account Title	Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	17,672				17,672	
Accounts receivable	8,520				8,520	
Prepaid rent	3,280				3,280	
Equipment	18,050				18,050	
Accumulated depreciation - equipment		4,895				4,895
Accounts payable		4,472				4,472
Notes payable		6,700				6,700
Owner's Capital		34,960				34,960
Owner's Drawings	6,250				6,250	
Service revenue		13,190		13,190		
Salaries and Wages expense	8,040		8,040			
Rent expense	2,260		2,260			
Depreciation expense	145		145			
Interest expense	83		83			
Interest payable		83				83
Totals	<u>64,300</u>	<u>64,300</u>	10,528	13,190	53,772	51,110
Net income			<u>2,662</u>			<u>2,662</u>
Totals			<u>13,190</u>	<u>13,190</u>	<u>53,772</u>	<u>53,772</u>

EXERCISE 3-22 (Continued)

WEST KAYNE CONSULTING

Balance Sheet

April 30, 2014

Assets

Current Assets		
Cash		\$17,672
Accounts receivable		8,520
Prepaid rent		<u>3,280</u>
Total current assets		29,472
Property, plant, and equipment		
Equipment	\$18,050	
Less: accumulated depreciation	<u>(4,895)</u>	<u>13,155</u>
Total assets		<u>\$42,627</u>

Liabilities and Owner's Equity

Current liabilities		
Accounts payable	\$ 4,472	
Interest payable	83	
Notes payable	<u>6,700</u>	
Total current liabilities		11,255
Owner's equity		
Owner's Capital		<u>31,372*</u>
Total liabilities and owner's equity		<u>\$42,627</u>

*Beg. Balance – Drawings + Net Income = Ending Balance

\$34,960 – \$6,250 + \$2,662 = \$31,372

(b) If West Kayne was a corporation instead of a sole proprietorship, its balance sheet would show Shareholders' Equity instead of Owners' Equity; Owner's Capital and Owner's Drawings accounts would be replaced with share capital (e.g., Common Shares) and Retained Earnings; and distribution of profit to Bradley would be in the form of dividends (which would be deducted in the calculation of Retained Earnings).

EXERCISE 3-23 (20-25 minutes)
NORTH BAY CORPORATION
Work Sheet (Partial)
For the Year Ended December 31, 2014

<u>Account Title</u>	<u>Adjusted Trial Balance</u>		<u>Statement of Comprehensive Income</u>		<u>Statement of Financial Position</u>	
	<u>Dr.</u>	<u>Cr.</u>	<u>Dr.</u>	<u>Cr.</u>	<u>Dr.</u>	<u>Cr.</u>
Cash	117,600				117,600	
FV-NI Investments	42,150				42,150	
Accounts receivable	56,720				56,720	
Prepaid rent	11,000				11,000	
FV-OCI Investments	33,990				33,990	
Equipment	219,000				<u>219,000</u>	
Accumulated depreciation - equipment		81,000				81,000
Accounts payable		54,470				54,470
Interest payable		4,800				4,800
Notes payable (current)		60,000				60,000
Common shares		100,000				100,000
Retained earnings		133,440				<u>133,440</u>
Service revenue		211,190		211,190		
Salaries and Wages expense	73,090		73,090			
Rent expense	66,000		66,000			
Depreciation expense	27,000		27,000			
Bad debt expense	5,250		5,250			
Interest expense	<u>5,100</u>		<u>5,100</u>			
Investment income		5,800				
Unrealized gain or loss-OCI				<u>6,200</u>		<u>6,200</u>
		<u>6,200</u>				
Totals	<u>656,900</u>	<u>656,900</u>	176,440	223,190	480,460	433,710
Net Income and OCI			<u>46,750</u>			<u>46,750</u>
Totals			<u>223,190</u>	<u>223,190</u>	<u>480,460</u>	<u>480,460</u>

EXERCISE 3-23 (Continued)

NORTH BAY CORPORATION Statement of Financial Position December 31, 2014

Assets

Current Assets		
Cash		\$117,600
FV-NI investments		42,150
Accounts receivable		56,720
Prepaid rent		<u>11,000</u>
Total current assets		227,470
FV-OCI investments		33,990
Property, plant, and equipment		
Equipment	\$219,000	
Less: accumulated depreciation	<u>(81,000)</u>	<u>138,000</u>
Total assets		<u>\$399,460</u>

Liabilities and Shareholders' Equity

Current liabilities		
Accounts payable		\$ 54,470
Interest payable		4,800
Notes payable		<u>60,000</u>
Total current liabilities		119,270
Shareholders' equity		
Common shares		100,000
Retained earnings		173,990*
Accumulated OCI		<u>6,200</u>
Total shareholders' equity		<u>280,190</u>
Total liabilities and shareholders' equity		<u>\$399,460</u>

***Beg. Balance + Net Income = Ending Balance**
\$133,440 + \$40,550 = \$173,990

EXERCISE 3-24 (10-15 minutes)

LAZY DOG INC.
Worksheet (partial)
For Month Ended February 28, 2014

	Trial Balance		Adjustments				Adjusted Trial Balance		Income Statement		Balance Sheet	
Acc. Titles	Dr.	Cr.	Dr.		Cr.		Dr.	Cr	Dr.	Cr.	Dr.	Cr.
Supplies	3,256				(a)	1,500	1,756				1,756	
Accumulated depreciation		6,682			(b)	257		6,939				6,939
Interest payable		100			(c)	50		150				150
Supplies expense			(a)	1,500			1,500		1,500			
Depreciation expense			(b)	257			257		257			
Interest expense			(c)	50			50		50			
Totals				1,807		1,807						

***EXERCISE 3-25 (15-20 minutes)**

(a)	1. Depreciation Expense	3,400	
	Accumulated Depr.—Equipment		3,400
	2. Property Tax Expense	2,525	
	Property Tax Payable		2,525
	3. Salaries and Wages Expense.....	3,900	
	Salaries and Wages Payable		3,900
	4. Service Revenue	5,500	
	Unearned Revenue		5,500
	5. Interest Expense	200	
	Interest Payable		200
(b)	Property Tax Payable.....	2,525	
	Property Tax Expense		2,525
	Salaries and Wages Payable	3,900	
	Salaries and Wages Expense.....		3,900
	Interest Payable	200	
	Interest Expense		200

***EXERCISE 3-26 (15-20 minutes)**

(a) Dec. 31		Service Revenue	110,000	
		Income Summary.....		110,000
31		Income Summary	12,800	
		Interest Expense.....		12,800
(b) Jan. 1		Service Revenue	9,700	
		Accounts Receivable		9,700
1		Interest Payable	6,400	
		Interest Expense.....		6,400

(c) & (e)

Accounts Receivable

Dec. 31	Balance	<u>9,700</u>	Jan. 1	Reversing	<u>9,700</u>

Service Revenue

Dec. 31	Closing	110,000	Dec. 31	Balance	110,000
Jan. 1	Reversing	9,700	Jan. 10		9,700

Interest Payable

Jan. 1	Reversing	<u>6,400</u>	Dec. 31	Balance	<u>6,400</u>

Interest Expense

Dec. 31	Balance	12,800	Dec. 31	Closing	12,800
Jan. 15		6,400	Jan. 1	Reversing	6,400

(d) (1) Jan. 10		Cash.....	9,700	
		Service Revenue.....		9,700
(2) Jan. 15		Interest Expense	6,400	
		Cash		6,400

***EXERCISE 3-27 (15-20 minutes)**

(a)

(1) Adjusting Entries:

1.	Rent Expense	3,600	
	Prepaid Rent.....		3,600
	(\$7,200 / 6 X 3)		
2.	Services Revenue	2,400	
	Unearned Revenue		2,400
3.	Prepaid Expenses	4,250	
	Operating Expenses		4,250
	(\$6,000 / 24 X 17)		
4.	Interest Expense	1,270	
	Interest Payable		1,270

(2) Reversing Entries:

1. No reversing entry required.
2. No reversing entry required.
3. No reversing entry required.
4. Interest Payable..... 1,270
 Interest Expense 1,270

TIME AND PURPOSE OF PROBLEMS

Problem 3-1 (Time 35-40 minutes)

Purpose—to provide an opportunity for the student to post daily transactions to a “T” account ledger, take a trial balance, prepare an income statement, a balance sheet and a statement of owner’s equity, close the ledger, and take a post-closing trial balance. The problem deals with routine transactions of a professional service firm and provides a good integration of the accounting process.

Problem 3-2 (Time 35-40 minutes)

Purpose—to provide an opportunity for the student to prepare adjusting entries, and prepare financial statements (income statement, balance sheet and statement of retained earnings).

Problem 3-3 (Time 25-30 minutes)

Purpose—to provide an opportunity for the student to prepare and discuss adjusting entries. The adjusting entries are fairly complex in nature.

Problem 3-4 (Time 35-40 minutes)

Purpose—to provide an opportunity for the student to prepare a statement of comprehensive income, statement of changes in shareholders’ equity, and a statement of financial position. In addition, closing entries must be made and a post-closing trial balance prepared.

Problem 3-5 (Time 40-50 minutes)

Purpose—to provide an opportunity for the student to complete a worksheet and then prepare a statement of financial position. In addition, adjusting and closing entries must be made and a post-closing trial balance prepared.

Problem 3-6 (Time 30-40 minutes)

Purpose—to provide an opportunity for the student to complete a work sheet and then prepare a multi-step income statement, statement of retained earnings, and a classified balance sheet.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 3-7 (Time 40-50 minutes)

Purpose—to provide the opportunity for the student to prepare a multiple-step income statement, a statement of retained earnings, and a classified balance sheet. Also, adjusting and closing entries must be prepared.

Problem 3-8 (Time 15-20 minutes)

Purpose—to provide the student with an opportunity to determine what adjusting entries need to be prepared for specific accounts listed in a partial trial balance. The student is also required to determine the amounts of certain revenue and expense items to be reported in the income statement.

Problem 3-9 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to prepare year-end adjusting entries from a trial balance and related information presented. The problem also requires the student to prepare an income statement, a balance sheet, and a statement of retained earnings. The problem covers the basics of the end-of-period adjusting process.

Problem 3-10 (Time 25-35 minutes)

Purpose—to provide an opportunity for the student to figure out the year-end adjusting entries that were made from a trial balance and an adjusted trial balance. The student is also required to prepare an income statement, a statement of retained earnings, and a balance sheet. In addition, the student needs to answer a number of questions related to specific accounts.

Problem 3-11 (Time 25-30 minutes)

Purpose—to provide an opportunity for the student to prepare adjusting entries.

Problem 3-12 (Time 30-40 minutes)

Purpose—to provide an opportunity for the student to prepare adjusting and closing entries. The student is also required to post the entries to “T” account ledger, and take a pre-closing trial balance. This problem presents basic adjustments including a number of accruals and deferrals. It provides the student with an integrated flow of the year-end accounting process.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 3-13 (Time 30-35 minutes)

Purpose—to provide an opportunity for the student to prepare adjusting and closing entries from a trial balance and related information. The student is also required to post the entries to “T” accounts.

Problem 3-14 (Time 30-35 minutes)

Purpose—to provide an opportunity for the student to determine what adjusting entries need to be made to specific accounts listed in a trial balance. The student is also required to determine which adjusting journal entries could be reversed.

Problem 3-15 (Time 30-35 minutes)

Purpose—to provide an opportunity for the student to determine what adjusting entries need to be made to specific accounts listed in a trial balance. The student is also required to determine which adjusting journal entries could be reversed.

Problem 3-16 (Time 30-35 minutes)

Purpose—to provide an opportunity for the student to analyze errors and prepare the necessary correcting entries for several errors in the original recording of transactions. The student must first document the incorrect entry that was made, the entry that should have been made and conclude with the correcting entry. The student is also required to arrive at a corrected trial balance.

Problem 3-17 (Time 15-20 minutes)

Purpose—to provide an opportunity for the student to deal with the alternate method of recording prepayments when recording cash receipts and disbursements. The student must adapt the adjustment process at the end of the year to deal with this alternate method. This is a short question.

SOLUTIONS TO PROBLEMS

PROBLEM 3-1

(a) (Explanations are omitted)

Cash				Equipment			
Sep. 1	32,000	Sep. 4	1,300	Sep. 2	12,500		
8	3,560	5	900	Bal 30	<u>12,500</u>		
20	2,100	10	680				
		18	6,300				
		19	2,000				
		30	1,400				
		30	85				
30 Bal	<u>24,995</u>						

Accounts Receivable				Accounts Payable			
Sep. 14	4,740	Sep. 20	2,100	Sep. 18	6,300	Sep. 2	12,500
25	2,780					Bal. 30	<u>6,200</u>
Bal. 30	<u>5,420</u>						

Prepaid Rent				Service Revenue			
Sep. 4	1,300	Sep. 30	650	Sep. 30	11,080	Sep. 8	3,560
Bal 30	<u>650</u>					14	4,740
						25	2,780
				Sep 30	<u>11,080</u>		<u>11,080</u>

Supplies				Accumulated Depreciation - Equipment			
Sep. 5	900	Sep. 30	330			Sep. 30	<u>208</u>
Bal. 30	<u>570</u>						

Miscellaneous Expense				Salaries and Wages Expense			
Sep. 10	680	Sep. 30	765	Sep. 30	<u>1,400</u>		
30	85						
Bal 30	<u>765</u>		<u>765</u>				

Supplies Expense			
Sep. 30	<u>330</u>	Sep. 30	<u>330</u>

PROBLEM 3-1 (Continued)

Depreciation Expense						Income Summary			
Sep. 30		<u>208</u>	Sep. 30		<u>208</u>	Sep. 30	650		11,080
							30	765	
							30	1,400	
							30	330	
							30	208	
							30 Inc.	7,727	
								<u>11,080</u>	<u>11,080</u>

Rent Expense					
Sep. 30		650			
Sep. 30	Bal	<u>650</u>	Sep. 30	Bal	<u>650</u>

Owner's Drawings			
Sep. 19	<u>2,000</u>	Sep. 30	<u>2,000</u>

(b) **EMILY CAIN, D.D.S.**
Adjusted Trial Balance
September 30

	<u>Debit</u>	<u>Credit</u>
Cash	\$24,995	
Accounts Receivable	5,420	
Supplies	570	
Prepaid Rent	650	
Equipment	12,500	
Accumulated Depreciation – Equipment		\$208
Accounts Payable		6,200
Owner's Capital		32,000
Owner's Drawings	2,000	
Service Revenue		11,080
Rent Expense	650	
Miscellaneous Expense	765	
Salaries and Wages Expense	1,400	
Supplies Expense	330	
Depreciation Expense	208	
	<u>\$49,488</u>	<u>\$49,488</u>

PROBLEM 3-1 (Continued)

(c) **EMILY CAIN, D.D.S.**
Income Statement
For the Month of September

Service revenue		\$11,080
Expenses:		
Rent expense	\$ 650	
Supplies expense	330	
Salaries and Wages expense	1,400	
Depreciation expense	208	
Miscellaneous expense	<u>765</u>	
Total expenses		<u>3,353</u>
Net income		<u>\$7,727</u>

EMILY CAIN, D.D.S.
Balance Sheet
As of September 30

Assets		Liabilities	
Cash	\$24,995	Accounts payable	\$6,200
Accounts receivable	5,420		
Supplies	570		
Prepaid rent	650		
Equipment	12,500	Owner's Equity	
Accum. Depreciation		Owner's Capital	<u>37,727</u>
- Equipment	<u>(208)</u>	Total liabilities and	
Total assets	<u>\$43,927</u>	owner's equity	<u>\$43,927</u>

EMILY CAIN, D.D.S.
Statement of Owner's Equity
For the Month of September

Owner's Capital September 1	\$ 0
Add: Investment by owner	32,000
Net income for September	<u>7,727</u>
	39,727
Deduct: Withdrawal by owner	<u>2,000</u>
Owner's Capital September 30	<u>\$37,727</u>

PROBLEM 3-1 (Continued)

(d)

EMILY CAIN, D.D.S.
Post-closing Trial Balance
September 30

	<u>Debit</u>	<u>Credit</u>
Cash	\$24,995	
Accounts Receivable	5,420	
Supplies	570	
Prepaid Rent	650	
Equipment	12,500	
Accumulated Depreciation – Equipment		\$208
Accounts Payable		6,200
Owner's Capital		<u>37,727</u>
Totals	<u>\$44,135</u>	<u>\$44,135</u>

PROBLEM 3-2

(a)	Dec. 31	Accounts Receivable	5,000	
		Sales Revenue		5,000
	31	Sales Revenue.....	2,800	
		Unearned Revenue		2,800
	31	Supplies Expense	5,400	
		Supplies.....		5,400
	31	Supplies Expense	6,000	
		Accounts Payable		6,000
	31	Depreciation Expense.....	11,500	
		Accumulated Depreciation- Equipment.....		11,500
	31	Interest Expense	650	
		Interest Payable		650
	31	Insurance Expense	9,400	
		Prepaid Insurance.....		9,400
	31	Salaries and Wages Expense	9,600	
		Salaries and Wages Payable....		9,600

PROBLEM 3-2 (Continued)

(b) YANCY ADVERTISING AGENCY LIMITED
Income Statement
For the Year Ended December 31, 2014

Revenues		
Sales revenue		\$70,000
Expenses		
Salaries and wages expense	\$19,600	
Depreciation expense	11,500	
Rent expense.....	4,000	
Supplies expense.....	11,400	
Insurance expense.....	9,400	
Interest expense.....	<u>1,000</u>	
Total expenses		<u>56,900</u>
Net income.....		<u><u>\$13,100</u></u>

YANCY ADVERTISING AGENCY LIMITED
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained Earnings, January 1, 2014	\$ 3,500
Add: Net income.....	<u>13,100</u>
Retained Earnings, December 31, 2014.....	<u><u>\$16,600</u></u>

PROBLEM 3-2 (Continued)

YANCY ADVERTISING AGENCY LIMITED

Balance Sheet December 31, 2014

Assets

Cash		\$10,750
Accounts receivable.....		35,000
Supplies		5,000
Prepaid insurance		2,200
Equipment.....	\$60,000	
Less: Accumulated depreciation— equipment	<u>39,500</u>	<u>20,500</u>
Total assets.....		<u>\$73,450</u>

Liabilities and Shareholders' Equity

Liabilities

Notes payable	\$ 5,000
Accounts payable.....	11,000
Interest payable	650
Unearned revenue	20,600
Salaries and wages payable	<u>9,600</u>
Total liabilities	<u>46,850</u>

Shareholders' equity

Common shares	\$10,000
Retained earnings	<u>16,600</u>
Total liabilities and shareholders' equity	<u>\$73,450</u>

PROBLEM 3-3

(a)

1. **Dec. 31** **Salaries and Wages Expense** **3,360**
 Salaries and Wages Payable ... **3,360**
 (5 X \$1,200 X 2/5) = \$2,400
 (3 X \$800 X 2/5) = 960
 Total accrued salaries \$3,360

2. **31** **Unearned Rent Revenue** **82,200**
 Rent Revenue **82,200**
 (5 X \$4,100 X 2) = \$41,000
 (4 X \$10,300 X 1) = 41,200
 Total rent earned \$82,200

3. **31** **Advertising Expense** **5,925**
 Prepaid Advertising **5,925**
 (A650 – \$600 per month
 for 8 months) = \$4,800
 (B974 – \$375 per month
 for 3 months) = 1,125
 Total adv. expense \$5,925

4. **31** **Interest Expense** **4,200**
 Interest Payable **4,200**
 (\$80,000 X 9% X 7/12)

(b) Excluding the effects of the adjusting entries, net income is understated by \$68,715 (\$82,200 – \$3,360 – \$5,925 – \$4,200). In addition, without the adjustments, Rolling Resort's current assets and current liabilities are overstated. Potential investors should be willing to wait for financial statements that include year-end adjusting entries in order to base their investment decision on more relevant and faithfully representative financial statements.

PROBLEM 3-4

(a) CANNED HEAT LIMITED
Statement of Comprehensive Income
For the Year Ended December 31, 2014

Revenues		
Service revenue.....		\$142,000
Expenses		
Salaries and wages expense	\$106,600	
Utilities expense.....	3,500	
Maintenance and Repairs expense...	13,200	
Depreciation expense	38,800	
Insurance expense	<u>8,800</u>	
Total expenses		<u>170,900</u>
Net loss		<u>\$(28,900)</u>
Other comprehensive income		<u>6,800</u>
Comprehensive income (loss)		<u>\$(22,100)</u>

CANNED HEAT LIMITED
Statement of Changes in Shareholders' Equity
For the Year Ended December 31, 2014

	Total	Common Shares	Comprehensive Income	Retained Earnings	AOCI
Beginning, Jan. 1, 2014	\$116,000	\$56,000		\$60,000	\$0
Common shares issued	24,000	24,000			
Net income (loss) for 2014	(28,900)		\$(28,900)	(28,900)	
OCI for 2014	6,800		6,800		6,800
Comprehensiv e Income (loss)			(22,100)		
Ending, Dec. 31, 2014	\$117,900	\$80,000		\$31,100	\$6,800

PROBLEM 3-4 (Continued)

CANNED HEAT LIMITED Statement of Financial Position December 31, 2014

Assets			
Current assets			
Cash		\$	18,000
Accounts receivable			42,000
Prepaid insurance			<u>1,800</u>
Total current assets			61,800
Fair value-OCI Investments			25,500
Property, plant, and equipment			
Equipment	\$98,000		
Less: Accumulated depreciation	<u>28,600</u>		<u>69,400</u>
Total assets			<u>\$156,700</u>
 Liabilities and Shareholders' Equity			
Current liabilities			
Accounts payable		\$31,600	
Salaries and wages payable		<u>7,200</u>	
Total current liabilities			38,800
Shareholders' equity			
Common shares	\$80,000		
Retained earnings	31,100		
Accumulated other comprehensive income	<u>6,800</u>		<u>117,900</u>
Total liabilities and shareholders' equity			<u>\$156,700</u>

PROBLEM 3-4 (Continued)

(b)

General Journal

Date		Account Titles and Explanation	Ref.	Debit	Credit
Dec. 31		Service Revenue	400	142,000	
		Income Summary	350		142,000
	31	Income Summary	350*	170,900	
		Maintenance and Repairs Expense	622		13,200
		Depreciation Expense	711		38,800
		Insurance Expense	722		8,800
		Salaries and Wages Expense	726		106,600
		Utilities Expense	732		3,500
	31	Retained Earnings	306	28,900	
		Income Summary	350*		28,900
	31	Unrealized Gain or Loss-OCI	801	6,800	
		Accumulated other Comprehensive Income	310*		6,800

*Assumed

PROBLEM 3-4 (Continued)

(b) (Continued)

CANNED HEAT LIMITED Post-Closing Trial Balance December 31, 2014

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 18,000	
Accounts Receivable	42,000	
Prepaid Insurance	1,800	
Fair value-OCI Investments	25,500	
Equipment	98,000	
Accumulated Depreciation - Equipment		\$ 28,600
Accounts Payable		31,600
Salaries and Wages Payable		7,200
Common Shares		80,000
Retained Earnings		31,100
Accumulated Other Comprehensive Income		6,800
	<u>\$185,300</u>	<u>\$185,300</u>

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PROBLEM 3-5

NOAH'S FOODS
Work Sheet
For the Year Ended September 30, 2014

Account Titles	Trial Balance		Adjustments			Adjusted Trial Balance		Stmt. of Comp. Income		Stmt. of Financial Position	
	Dr.	Cr.	Dr.		Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	37,400					37,400				37,400	
Supplies	18,600			(b)	17,100	1,500				1,500	
Prepaid Insurance	31,900			(a)	28,300	3,600				3,600	
FV-OCI Investment	17,200			(g)	3,700	13,500				13,500	
Land	62,800					62,800				62,800	
Equipment	120,000					120,000				120,000	
Accum. Depr. – Equip.		36,200		(c)	4,800		41,000				41,000
Accounts Payable		14,600					14,600				14,600
Unearned Revenue		2,700	(d)	1,000			1,700				1,700
Mortgage Payable		50,000					50,000				50,000
Interest Payable				(f)	6,200		6,200				6,200
Prop. Tax Payable				(e)	3,000		3,000				3,000
Common Shares		50,000					50,000				50,000
Retained Earnings		59,700					59,700				59,700
Dividends	14,000					14,000				14,000	
Sales Revenue		278,500		(d)	1,000		279,500		279,500		
Sal. and Wages Exp.	109,000					109,000		109,000			
Mtce. and Rep. Exp.	30,500					30,500		30,500			
Utilities Expense	26,300					26,300		26,300			
Prop. Tax Expense	18,000		(e)	3,000		21,000		21,000			
Interest Expense	6,000		(f)	6,200		12,200		12,200			
Totals	491,700	491,700									

PROBLEM 3-5 (Continued)

Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Stmt. of Comp. Income		Stmt. of Financial Position	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Insurance Expense			(a) 28,300		28,300		28,300			
Supplies Expense			(b) 17,100		17,100		17,100			
Depr. Expense			(c) 4,800		4,800		4,800			
Unrealized gain or Loss (OCI)			(g) 3,700		3,700		3,700			
Totals			<u>64,100</u>	<u>64,100</u>	<u>505,700</u>	<u>505,700</u>	<u>252,900</u>	<u>279,500</u>	<u>252,800</u>	<u>226,200</u>
Net Income and OCI							<u>26,600</u>			<u>26,600</u>
Totals							<u>279,500</u>	<u>279,500</u>	<u>252,800</u>	<u>252,800</u>

Key:

(a) Expired Insurance

(b) Supplies Used

(c) Depreciation Expense

(d) Sales Revenue

(e) Accrued Property Tax

(f) Accrued Interest Payable

(g) Holding Loss on FV-OCI Investment

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PROBLEM 3-5 (Continued)

(b)

NOAH'S FOODS Statement of Financial Position September 30, 2014

Assets			
Current assets			
Cash			\$ 37,400
Supplies			1,500
Prepaid insurance			<u>3,600</u>
Total current assets			42,500
Fair value-OCI Investments			13,500
Property, plant, and equipment			
Land	\$62,800		
Equipment	\$120,000		
Less: Accum. depreciation....	<u>41,000</u>	<u>79,000</u>	<u>141,800</u>
Total assets			<u>\$197,800</u>
Liabilities and Shareholders' Equity			
Current liabilities			
Current portion of long-term debt.....			\$ 10,000
Accounts payable			14,600
Unearned revenue.....			1,700
Interest payable.....			6,200
Property tax payable.....			<u>3,000</u>
Total current liabilities.....			35,500
Long-term liabilities			
Mortgage payable, net of current portion.....			<u>40,000</u>
Total liabilities			75,500
Shareholders' equity			
Common shares			50,000
Retained earnings			76,000
Accumulated other comprehensive income (loss)			<u>(3,700)</u>
Total shareholders' equity			<u>122,300</u>
Total liabilities and shareholders' equity ..			<u>\$197,800</u>

PROBLEM 3-5 (Continued)

(c) Sep. 30	Insurance Expense	28,300	
	 Prepaid Insurance.....		28,300
30	Supplies Expense	17,100	
	 Supplies.....		17,100
30	Depreciation Expense	4,800	
	 Accumulated Depreciation ...		4,800
30	Unearned Revenue	1,000	
	 Sales Revenue.....		1,000
30	Property Tax Expense.....	3,000	
	 Property Tax Payable.....		3,000
30	Interest Expense.....	6,200	
	 Interest payable		6,200
30	Unrealized Gain or Loss-OCI	3,700	
	 Fair Value-OCI Investments..		3,700

PROBLEM 3-5 (Continued)

(d) Sep. 30	Sales Revenue	279,500	
	Income Summary		279,500
30	Income Summary	249,200	
	Salaries and Wages		
	Expense.....		109,000
	Maintenance and Repairs		
	Expense.....		30,500
	Insurance Expense		28,300
	Property Tax Expense.....		21,000
	Supplies Expense		17,100
	Utilities Expense		26,300
	Interest Expense		12,200
	Depreciation Expense.....		4,800
30	Income Summary	30,300	
	Retained Earnings.....		30,300
30	Accumulated Other		
	Comprehensive Income	3,700	
	Unrealized Gain or Loss-		
	OCI.....		3,700
30	Retained Earnings.....	14,000	
	Dividends.....		14,000

PROBLEM 3-5 (Continued)

(e)

NOAH'S FOODS Post-Closing Trial Balance September 30, 2014

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 37,400	
Supplies	1,500	
Prepaid Insurance	3,600	
Fair Value-OCI Investments	13,500	
Land	62,800	
Equipment.....	120,000	
Accumulated Depreciation		\$ 41,000
Accounts Payable		14,600
Unearned Revenue.....		1,700
Interest Payable.....		6,200
Property Tax Payable.....		3,000
Mortgage Payable.....		50,000
Common Shares.....		50,000
Retained Earnings.....		76,000
Accumulated Other Comprehensive Income (Loss).....	3,700	
	<u>\$242,500</u>	<u>\$242,500</u>

PROBLEM 3-6

SLUM DOG FASHION CENTRE INC.

Work Sheet

For the Year Ended November 30, 2014

Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	29,200				29,200				29,200	
Accounts Receivable	82,000				82,000				82,000	
Inventory	105,000				105,000				105,000	
Supplies	8,600		(a)	5,500	3,100				3,100	
Equipment	225,000				225,000				225,000	
Accumulated Depr.- Equipment		86,000		(b) 40,000		126,000				126,000
Trucks	128,000				128,000				128,000	
Accumulated Depr. Trucks		39,000		(c) 30,000		69,000				69,000
Notes Payable		85,000				85,000				85,000
Accounts Payable		78,500				78,500				78,500
Common Shares		300,000				300,000				300,000
Retained Earnings		38,000				38,000				38,000
Sales Revenue		950,200				950,200		950,200		
Sales Returns and Allowances	24,200				24,200		24,200			
Cost of Goods Sold	611,500				611,500		611,500			

PROBLEM 3-6 (Continued)

Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Salaries and Wages Expense	150,000				150,000		150,000			
Advertising Expense	46,400				46,400		46,400			
Utilities Expense	24,000				24,000		24,000			
Mtce. and Repairs Expense	32,100				32,100		32,100			
Delivery Expense	46,700				46,700		46,700			
Rent Expense	64,000				64,000		64,000			
Totals	1,576,700	1,576,700								
Supplies Expense			(a) 5,500		5,500		5,500			
Depreciation Expense			(b) 40,000		40,000		40,000			
			(c) 30,000		30,000		30,000			
Interest Expense			(d) 9,000		9,000		9,000			
Interest Payable				(d) 9,000		9,000				9,000
Totals			84,500	84,500	1,655,700	1,655,700	1,083,400	950,200	572,300	705,500
Net Loss								133,200	133,200	
Totals							1,083,400	1,083,400	705,500	705,500

Key:

(a) Store supplies used

(b) Depreciation expense-equipment

(c) Depreciation expense-trucks

(d) Accrued interest payable

PROBLEM 3-6 (Continued)

(b) SLUM DOG FASHION CENTRE INC.
Income Statement
For the Year Ended November 30, 2014

Sales revenue		
Sales.....		\$950,200
Less: Sales returns and allowances.....		<u>24,200</u>
Net sales revenue		926,000
Cost of goods sold		<u>611,500</u>
Gross profit		314,500
Operating expenses		
Selling expenses		
Salaries and wages expense	\$90,000	
(\$150,000 x 60%)		
Advertising expense	46,400	
Rent expense	57,600	
(\$64,000 x 90%)		
Delivery expense	46,700	
Utilities expense	21,600	
(\$24,000 x 90%)		
Depreciation expense	70,000	
Supplies expense	<u>5,500</u>	
Total selling expenses		\$337,800
Administrative expenses		
Salaries and wages expense	60,000	
(\$150,000 x 40%)		
Maintenance and repairs		
expense	32,100	
Rent expense	6,400	
(\$64,000 x 10%)		
Utilities expense	<u>2,400</u>	
(\$24,000 x 10%)		
Total admin. expenses		<u>100,900</u>
Total operating expenses.....		<u>438,700</u>
Loss from operations		124,200
Other expenses and losses		
Interest expense		<u>9,000</u>
Net loss		<u><u>\$133,200</u></u>

PROBLEM 3-6 (Continued)

SLUM DOG FASHION CENTRE INC. Statement of Retained Earnings (Deficit) For the Year Ended November 30, 2014

Retained Earnings, December 1, 2013	\$38,000
Less: Net loss	<u>133,200</u>
Deficit, November 30, 2014	<u><u>(\$95,200)</u></u>

SLUM DOG FASHION CENTRE INC. Balance Sheet November 30, 2014

Assets			
Current assets			
Cash			\$ 29,200
Accounts receivable			82,000
Inventory			105,000
Supplies			<u>3,100</u>
Total current assets			219,300
Property, plant, and equipment			
Equipment.....	\$225,000		
Accumulated depreciation— equipment	<u>126,000</u>	\$99,000	
Trucks	128,000		
Accumulated depreciation — trucks.....	<u>69,000</u>	<u>59,000</u>	<u>158,000</u>
Total assets.....			<u><u>\$377,300</u></u>
Liabilities and Shareholders' Equity			
Current liabilities			
Current portion of notes payable.....			\$ 35,000
Accounts payable			78,500
Interest payable			<u>9,000</u>
Total current liabilities			122,500
Long-term liabilities			
Notes payable, net of current portion.....			<u>50,000</u>
Total liabilities			172,500
Shareholders' equity			
Common Shares.....	\$300,000		
Deficit	<u>(95,200)</u>		<u>204,800</u>
Total liabilities and shareholders' equity			<u><u>\$377,300</u></u>

PROBLEM 3-7

(a) SECOND HAND ALMOST NEW DEPARTMENT STORE INC.
Income Statement
For the Year Ended December 31, 2014

Sales revenue		
Sales		\$718,000
Less: Sales returns and allowances		<u>8,000</u>
Net sales revenue		710,000
Cost of goods sold		<u>412,700</u>
Gross profit		297,300
Operating expenses		
Selling expenses		
Sales salaries and wages expense ...	\$76,000	
Sales commission expense.....	14,500	
Depreciation expense—equipment ..	13,300	
Utilities expense	6,600	
(\$11,000 x 60%)		
Insurance expense	<u>4,320</u>	
(\$7,200 x 60%)		
Total selling expenses		\$114,720
Administrative expenses		
Office salaries and wages expense ..	32,000	
Depreciation expense—building.....	10,400	
Property tax expense	4,800	
Utilities expense	4,400	
(\$11,000 x 40%)		
Insurance expense	<u>2,880</u>	
(\$7,200 x 40%)		
Total admin. expenses		<u>54,480</u>
Total oper. expenses.....		<u>169,200</u>
Income from operations		128,100
Other revenues and gains		
Interest income.....	4,000	
Other expenses and losses		
Interest expense	<u>(11,000)</u>	<u>(7,000)</u>
Net income		<u>\$121,100</u>

PROBLEM 3-7 (Continued)

SECOND HAND ALMOST NEW DEPARTMENT STORE INC.

Statement of Retained Earnings For the Year Ended December 31, 2014

Retained Earnings, January 1	\$16,600
Add: Net income.....	<u>121,100</u>
	137,700
Less: Dividends.....	<u>28,000</u>
Retained Earnings, December 31.....	<u>\$109,700</u>

SECOND HAND ALMOST NEW DEPARTMENT STORE INC.

Balance Sheet December 31, 2014

Assets			
Current assets			
Cash.....			\$ 68,000
Accounts receivable			95,300
Inventory			75,000
Prepaid insurance.....			<u>2,400</u>
Total current assets.....			240,700
Property, plant, and equipment			
Building	\$190,000		
Less: Accumulated depreciation—building	<u>52,500</u>	\$137,500	
Equipment	110,000		
Less: Accumulated depreciation—equipment..	<u>42,900</u>	<u>67,100</u>	<u>204,600</u>
Total assets			<u>\$445,300</u>

PROBLEM 3-7 (Continued)

SECOND HAND ALMOST NEW DEPARTMENT STORE INC.

Balance Sheet (Continued)

December 31, 2014

Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable		\$ 79,300
Mortgage payable due next year		20,000
Property taxes payable		4,800
Sales commission payable		3,500
Interest payable		<u>8,000</u>
Total current liabilities		115,600
Long-term liabilities		
Mortgage payable		<u>60,000</u>
Total liabilities		175,600
Shareholders' equity		
Common Shares	\$160,000	
Retained Earnings	<u>109,700</u>	<u>269,700</u>
Total liabilities and shareholders' equity		<u>\$445,300</u>

PROBLEM 3-7 (Continued)

(b) Depreciation Expense—Building	10,400	
Accumulated Depreciation—		
Building		10,400
Depreciation Expense—Equipment.....	13,300	
Accumulated Depreciation—		
Equipment		13,300
Insurance Expense	7,200	
Prepaid Insurance.....		7,200
Interest Expense	8,000	
Interest Payable		8,000
Property Tax Expense	4,800	
Property Tax Payable		4,800
Sales Commission Expense.....	3,500	
Sales Commission Payable.....		3,500

PROBLEM 3-7 (Continued)

(c)	Sales	718,000	
	Interest Income	4,000	
	Income Summary		722,000
	Income Summary	600,900	
	Sales Returns and Allowances		8,000
	Cost of Goods Sold		412,700
	Salaries and Wages Expense.....		108,000
	Sales Commission Expense		14,500
	Property Tax Expense		4,800
	Utilities Expense		11,000
	Depreciation Expense—Building.....		10,400
	Depreciation Expense—		
	Equipment		13,300
	Insurance Expense		7,200
	Interest Expense		11,000
	Income Summary	121,100	
	Retained Earnings		121,100
	Retained Earnings.....	28,000	
	Dividends		28,000

PROBLEM 3-8

(a)		
-1-		
Depreciation Expense- Equipment	57,500	
Accumulated Depreciation –		
Equipment		57,500
(((\$960,000–\$40,000) X 1/16)		
-2-		
Interest Expense.....	3,669	
Interest Payable		3,669
(\$186,000 X 10% X 72/365)		
-3-		
Sales Revenue	50,000	
Unearned Revenue.....		50,000
-4-		
Prepaid Advertising	1,100	
Advertising Expense.....		1,100
-5-		
Salaries and Wages Expense	11,800	
Salaries and Wages Payable		11,800

- (b)**
- 1. Interest expense, \$12,669 (\$9,000 + 3,669).**
 - 2. Sales revenue, \$700,000 (\$750,000 – \$50,000).**
 - 3. Advertising expense, \$60,900 (\$62,000 – \$1,100).**
 - 4. Salaries and wages expense, \$91,800 (\$80,000 + \$11,800).**

PROBLEM 3-9

(a)		
	-1-	
Service Revenue.....	6,900	
Unearned Revenue.....		6,900
	-2-	
Accounts Receivable	7,300	
Service Revenue		7,300
	-3-	
Bad Debt Expense.....	6,300	
Allowance for Doubtful Accounts.....		6,300
	-4-	
Prepaid Insurance	6,000	
Insurance Expense		6,000
	-5-	
Depreciation Expense—Equipment	7,088	
Accum. Depr. —Equipment		7,088
(\$85,000-6,250) x 9%		
	-6-	
Interest Expense.....	71	
Interest Payable		71
(\$7,200 X 12% X 30/365)		
	-7-	
Prepaid Rent.....	750	
Rent Expense		750
	-8-	
Salaries and Wages Expense	2,510	
Salaries and Wages Payable		2,510

PROBLEM 3-9 (Continued)

-9-

Retained Earnings.....	80,000	
Dividends Payable.....		80,000

(b) MUSTANG ROVERS CONSULTING LIMITED
Income Statement
For the Year Ended December 31, 2014

Service Revenue		\$100,400
Expenses:		
Salaries and wages expense	\$31,010	
Utilities expense.....	1,080	
Rent expense.....	9,000	
Insurance expense.....	12,500	
Bad debt expense	6,300	
Depreciation expense	7,088	
Miscellaneous expense	720	
Interest expense.....	<u>71</u>	
Total expenses		<u>67,769</u>
Net income.....		<u><u>\$32,631</u></u>

PROBLEM 3-9 (Continued)

MUSTANG ROVERS CONSULTING LIMITED Balance Sheet December 31, 2014

Assets

Current assets

Cash		\$83,700
Accounts receivable.....	\$88,400	
Less: Allowance for doubtful accounts.....	<u>(7,050)</u>	81,350
Supplies		1,960
Prepaid insurance		6,000
Prepaid rent		<u>750</u>
Total current assets		173,760
Equipment.....	85,000	
Less: Accumulated depreciation.....	<u>(13,338)</u>	<u>71,662</u>
Total assets		<u><u>\$245,422</u></u>

Liabilities and Shareholders' Equity

Current liabilities

Unearned revenue	\$ 6,900
Interest payable	71
Salaries and wages payable	2,510
Dividends payable	80,000
Notes payable	<u>7,200</u>
Total liabilities.....	96,681

Shareholders' equity

Common shares	35,010
Retained earnings	<u>113,731</u>
Total liabilities and shareholders' equity	<u><u>\$245,422</u></u>

PROBLEM 3-9 (Continued)

MUSTANG ROVERS CONSULTING LIMITED
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained Earnings, January 1	\$161,100
Add: Net income	<u>32,631</u>
	193,731
Less: Dividends	<u>80,000</u>
Retained Earnings, December 31	<u><u>\$113,731</u></u>

PROBLEM 3-10

(a)	Dec. 31	Accounts Receivable	12,800	
		Service Revenue		12,800
	31	Unearned Revenue	1,400	
		Service Revenue		1,400
	31	Supplies Expense	3,150	
		Supplies		3,150
	31	Supplies	150	
		Accounts Payable		150
	31	Rent Expense	2,000	
		Prepaid Rent		2,000
	31	Depreciation Expense	6,750	
		Accumulated Depreciation		6,750
	31	Cash	1,000	
		Interest Income		1,000
	31	Insurance Expense	750	
		Prepaid Insurance		750
	31	Salaries and Wages Expense	1,500	
		Salaries and Wages Payable ...		1,500

PROBLEM 3-10 (Continued)

(b) BROOK CORPORATION
Income Statement
For the Year Ended December 31, 2014

Revenues		
Service revenue.....		\$72,800
Interest income.....		<u>1,000</u>
		73,800
 Expenses		
Salaries and Wages expense	\$11,850	
Supplies expense.....	8,150	
Depreciation expense	6,750	
Rent expense.....	6,000	
Insurance expense.....	<u>750</u>	
Total expenses		<u>33,500</u>
Net income.....		<u>\$40,300</u>

BROOK CORPORATION
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained Earnings, January 1	\$ 4,500
Add: Net income.....	<u>40,300</u>
Retained Earnings, December 31.....	<u>\$44,800</u>

PROBLEM 3-10 (Continued)

BROOK CORPORATION Balance Sheet December 31, 2014

Assets		
Current Assets		
Cash.....		\$ 8,000
Accounts receivable.....		25,800
Note receivable		10,000
Supplies.....		5,500
Prepaid rent.....		4,000
Prepaid insurance.....		<u>2,500</u>
Total current assets		55,800
Equipment.....	\$50,000	
Less: Accumulated depreciation	<u>33,750</u>	<u>16,250</u>
Total assets		<u>\$72,050</u>
Liabilities and Shareholders' Equity		
Liabilities		
Accounts payable		\$ 5,150
Unearned revenue		5,600
Salaries and wages payable		<u>1,500</u>
Total liabilities		12,250
Shareholders' equity		
Common shares.....	\$15,000	
Retained earnings.....	<u>44,800</u>	
Total shareholders' equity.....		<u>59,800</u>
Total liabilities and shareholders' equity		<u>\$72,050</u>

PROBLEM 3-11

(a)			
	-1-		
Prepaid Advertising	335		
Advertising Expense		335	
	-2-		
Interest Expense	250		
Interest Payable		250	
(\$15,000 X 10% X 2/12)			
	-3-		
Salaries and Wages Expense	2,480		
Salaries and Wages Payable		2,480	
	-4-		
Interest Receivable	500		
Interest Income		500	
	-5-		
Bad Debt Expense	1,560		
Allowance for Doubtful Accounts ..		1,560	
	-6-		
Supplies	110		
Office Expense		110	
	-7-		
Rent Expense	1,000		
Rent Payable		1,000	
	-8-		
Insurance Expense	195		
Prepaid Insurance		195	
(2/12 X \$1,170)			

PROBLEM 3-11 (Continued)

-9-		
Property Tax Expense	1,670	
Property Tax Payable		1,670
-10-		
Interest Receivable	75	
Interest Income		75
(\$6,000 X 15% X 1/12)		
-11-		
Unearned Rent Revenue.....	860	
Rent Revenue.....		860
(2/6 X \$2,580)		
-12-		
Rent Expense	5,533	
Prepaid Rent Expense		5,533
(4/6 X \$8,300)		
-13-		
Utilities Expense	510	
Utilities Payable		510
-14-		
Depreciation Expense—Equipment.....	1,400	
Accum. Depr.—Equipment.....		1,400

PROBLEM 3-12

(a), (b), (d)

Cash		Rent Receivable	
Bal.	115,000	Adj.	4,000
Accounts Receivable		Prepaid Insurance	
Bal.	63,000	Bal.	12,000
		Adj.	5,300
		Bal.	6,700
Allow. for Doubtful Accts.		Land	
	Bal.	Bal.	350,000
	9,000		
	Adj.		
	6,120		
	Bal.		
	15,120		
Buildings		Equipment	
Bal.	600,000	Bal.	300,000
Accum. Depr. - Buildings		Accum. Depr. - Equipment	
	Bal.		Bal.
	40,000		120,000
	Adj.		Adj.
	20,000		18,000
	Bal.		Bal.
	60,000		138,000
Unearned Revenue		Salaries and Wages Payable	
	Adj.		Adj.
	9,900		3,600
Common Shares		Retained Earnings	
	Bal.		Bal.
	880,000		152,000
			Cl.
			180,080
			Bal.
			332,080
		Sales Revenue	
		Adj.	9,900
		Bal.	413,000
		Close	<u>403,100</u>
			<u>413,000</u>
		Rent Revenue	
		Close	48,000
		Bal.	44,000
		Adj.	<u>4,000</u>
			<u>48,000</u>

PROBLEM 3-12 (Continued)

(a), (b), (d)

Bad Debt Expense				Utilities Expense			
Adj.	<u>6,120</u>	Close	<u>6,120</u>	Bal.	<u>74,000</u>	Close	<u>74,000</u>
Maintenance and Repairs Expense				Insurance Expense			
Bal.	<u>54,000</u>	Close	<u>54,000</u>	Adj.	<u>5,300</u>	Close	<u>5,300</u>
Salaries and Wages Expense							
Bal.	90,000	Close	93,600				
Adj.	<u>3,600</u>						
	<u>93,600</u>		<u>93,600</u>				
Depr. Expense							
Adj.	20,000	Close	<u>38,000</u>				
Adj.	<u>18,000</u>						
	<u>38,000</u>						
Income Summary							
Exp.	271,020	Rev.	451,100				
Cl.	<u>180,080</u>						
	<u>451,100</u>		<u>451,100</u>				

PROBLEM 3-12 (Continued)

(b)		
	-1-	
Depreciation Expense.....	20,000	
Accumulated Depreciation—		
Buildings.....		20,000
(1/30 X \$600,000)		
	-2-	
Depreciation Expense.....	18,000	
Accumulated Depreciation—		
Equipment.....		18,000
10% X (\$300,000-\$120,000)		
	-3-	
Insurance Expense	5,300	
Prepaid Insurance.....		5,300
	-4-	
Rent Receivable	4,000	
Rent Revenue.....		4,000
(1/11 X \$44,000)		
	-5-	
Bad Debt Expense.....	6,120	
Allowance for Doubtful Accounts...		6,120
(24% X \$63,000 = \$15,120 less existing balance of \$9,000)		
	-6-	
Salaries and Wages Expense.....	3,600	
Salaries and Wages Payable.....		3,600
	-7-	
Sales Revenue	9,900	
Unearned Revenue		9,900

PROBLEM 3-12 (Continued)

(c) MASTERS GOLF CLUB, INC.
Adjusted Trial Balance
December 31

	<u>Dr.</u>	<u>Cr.</u>
Cash	\$115,000	
Accounts Receivable	63,000	
Allowance for Doubtful Accounts		\$15,120
Rent Receivable	4,000	
Prepaid Insurance	6,700	
Land	350,000	
Buildings.....	600,000	
Accumulated Depreciation—Buildings.....		60,000
Equipment.....	300,000	
Accumulated Depreciation—Equipment ...		138,000
Salaries and Wages Payable		3,600
Unearned Revenue.....		9,900
Common Shares.....		880,000
Retained Earnings.....		152,000
Sales Revenue		403,100
Rent Revenue		48,000
Utilities Expense	74,000	
Bad Debt Expense.....	6,120	
Salaries and Wages Expense	93,600	
Maintenance and Repairs Expense.....	54,000	
Depreciation Expense—Buildings	38,000	
Insurance Expense.....	5,300	
	<u>\$1,709,720</u>	<u>\$1,709,720</u>

PROBLEM 3-12 (Continued)

(d)		-Dec. 31-	
	Sales Revenue (Dues).....	345,100	
	Sales Revenue (Green Fees)	58,000	
	Rent Revenue	48,000	
	Income Summary.....		451,100
		-31-	
	Income Summary	271,020	
	Utilities Expense		74,000
	Bad Debt Expense		6,120
	Salaries and Wages Expense.....		93,600
	Maintenance and Repairs Expense ...		54,000
	Depreciation Expense—Buildings.....		38,000
	Insurance Expense		5,300
		-31-	
	Income Summary	180,080	
	Retained Earnings		180,080

PROBLEM 3-13

(a), (b) and (c)

Cash		Accounts Receivable	
Bal.	18,500	Bal.	42,000
Inventory		Equipment	
Bal.	80,000	Bal.	84,000
Prepaid Insurance		Notes Payable	
Bal.	5,100	Adj.	2,100
Common Shares		Sales Revenue	
	Bal.	Cls.	600,000
	80,600	Bal.	600,000
Salaries and Wages Expense		Advertising Expense	
Bal.	115,000	Bal.	6,700
Adj.	8,000	Adj.	750
	<u>123,000</u>	Close	<u>5,950</u>
			<u>6,700</u>
Bad Debt Expense		Office Expense	
Adj.	<u>3,800</u>	Bal.	5,000
		Adj.	3,500
		Close	<u>1,500</u>
			<u>5,000</u>
Interest Payable		Depreciation Expense	
	Adj.	Adj.	<u>8,400</u>
	6,420	Close	<u>8,400</u>
Supplies		Salaries and Wages Payable	
Adj.	3,500	Adj.	<u>8,000</u>
Retained Earnings		Cost of Goods Sold	
	Bal.	Bal.	<u>398,000</u>
	10,000	Close	<u>398,000</u>
	I.S.		
	<u>50,830</u>		
	Bal.		
	<u>60,830</u>		

PROBLEM 3-13 (Continued)

(a), (b) and (c)

Allow. for Doubtful Accts.

	Bal.	700
	Adj.	<u>3,800</u>
		<u>4,500</u>

Accum. Depr. Of Equipment

	Bal.	35,000
	Adj.	<u>8,400</u>
		<u>43,400</u>

Insurance Expense

Adj.	<u>2,100</u>	Close	<u>2,100</u>

Interest Expense

Adj.	<u>6,420</u>	Close	<u>6,420</u>

Prepaid Advertising

Adj.	<u>750</u>	

Income Summary

Exp.	549,170	Sales	600,000
R.E.	<u>50,830</u>		
	<u>600,000</u>		<u>600,000</u>

PROBLEM 3-13 (Continued)

(b)		
	-1-	
Bad Debt Expense.....	3,800	
Allowance for Doubtful Accounts.....		3,800
	-2-	
Depreciation Expense.....	8,400	
Accum. Depr.—Equipment.....		8,400
	-3-	
Insurance Expense	2,100	
Prepaid Insurance.....		2,100
	-4-	
Interest Expense	6,420	
Interest Payable		6,420
	-5-	
Salaries and Wages Expense.....	8,000	
Salaries and Wages Payable.....		8,000
	-6-	
Prepaid Advertising	750	
Advertising Expense		750
	-7-	
Supplies	3,500	
Office Expense.....		3,500

PROBLEM 3-13 (Continued)

(c)	Dec. 31		
Income Summary	549,170		
Cost of Goods Sold		398,000	
Advertising Expense		5,950	
Salaries and Wages Expense.....		123,000	
Office Expense.....		1,500	
Insurance Expense		2,100	
Bad Debt Expense		3,800	
Depreciation Expense		8,400	
Interest Expense		6,420	
	Dec. 31		
Sales Revenue.....	600,000		
Income Summary.....		600,000	
	Dec. 31		
Income Summary	50,830		
Retained Earnings		50,830	

PROBLEM 3-14

(a)

1.	Prepaid Advertising	4,500	
	Advertising Expense.....		4,500
	(\$1,500 X 3)		
2.	Depreciation Expense—Building	6,200	
	Accumulated Depreciation		
	– Building.....		6,200
	((\$124,000 - \$30,000) / 20 years)		
3.	Insurance Expense.....	1,375	
	Prepaid Insurance		1,375
	(\$2,640 X 4/12) + (\$1,980 / 3 X 9/12)		
4.	Rent Receivable.....	3,600	
	Rent Revenue		3,600
	(\$7,200 X 6/12)		
5.	Allowance for Doubtful Accounts	2,700	
	Accounts Receivable		2,700
	Bad Debts Expense.....	3,212	
	Allowance for Doubtful Accounts		3,212
	[4% X (\$103,000 - \$2,700)] – (\$3,500 – \$2,700)		
6.	Advances to Employees	600	
	Salaries and Wages Expense		600
7.	Interest Expense.....	2,100	
	Interest Payable		2,100
	(\$180,000 X 7% X 2/12)		
8.	Depreciation Expense—Equipment.....	2,800	
	Accumulated Depreciation—		
	Equipment.....		2,800
	(\$33,600 / 12 years)		

PROBLEM 3-14 (Continued)

9. Interest Receivable.....	1,500	
Interest Income		1,500
(\$40,000 X 9% X 5/12)		
 10. Cost of Goods Sold.....	 67,100	
Inventory (ending)	90,000	
Purchase Discounts.....	900	
Purchases		98,000
Inventory (beginning).....		60,000

(b) Reverse entries: 1, 4, 7 and 9

PROBLEM 3-15

(a)

1.	Rent Revenue	8,500	
	Unearned Rent Revenue		8,500
	(\$10,200 X 10/12)		
2.	Sales Revenue	1,000	
	Accounts Receivable		1,000
	Bad Debt Expense	3,135	
	Allowance for Doubtful Accounts		3,135
	7% X (\$56,500 - \$1,000) – \$750		
3.	Cost of Goods Sold	152,100	
	Inventory (ending)	77,000	
	Purchase Discounts	2,400	
	Purchases		170,000
	Freight-in		3,500
	Inventory (beginning)		58,000
4.	Insurance Expense	625	
	Prepaid Insurance		625
	[((\$1,320 X 4/24) + (\$1,620 X 9/36))]		
5.	Depreciation Expense	9,700	
	Accumulated Depreciation -		
	Equipment		9,700
	(\$90,000 X 10%) + (\$14,000 X 5%)		
6.	Interest Expense	1,375	
	Interest Payable		1,375
	(\$50,000 X 11% X 3/12)		
7.	Interest Receivable	900	
	Interest Income		900
	(\$18,000 X 12% X 5/12)		

PROBLEM 3-15 (Continued)

8.	Rent Expense	7,700	
	 Prepaid Rent		7,700
	 (\$13,200 X 7/12)		
9.	Fair Value-Net Income Investments	800	
	 Investment Income		800
10.	Unrealized Gain or Loss-OCI	1,500	
	 Fair Value-OCI Investments		1,500
	 \$14,000 - (\$25 X 500)		

(b) Reverse entries: 1, 6, and 7

PROBLEM 3-16

(a) (1) Incorrect entry:

1.	Cash	570	
	Accounts Receivable		570
2.	Supplies	900	
	Accounts Payable		900
3.	Utilities Expense.....	30	
	Cash		30
4.	Salaries and Wages Expense	1,800	
	Cash		1,800
5.	Equipment.....	90	
	Cash		90

(2) Correct entry:

1.	Cash	750	
	Accounts Receivable		750
2.	Equipment.....	900	
	Accounts Payable		900
3.	Advertising Expense.....	30	
	Cash		30
4.	Salaries and Wages Expense	1,200	
	Salaries and Wages Payable	600	
	Cash		1,800
5.	Maintenance and Repairs Expense.....	90	
	Cash		90

(3) Correcting entry:

PROBLEM 3-16 (Continued)

1.	Cash	180	
	Accounts Receivable		180
2.	Equipment.....	900	
	Supplies		900
3.	Advertising Expense.....	30	
	Utilities Expense.....		30
4.	Salaries and Wages Payable	600	
	Salaries and Wages Expense		600
5.	Maintenance and Repairs Expense.....	90	
	Equipment.....		90

(b) **DOWNTOWN TV REPAIR LTD.**
Trial Balance
March 31, 2014

	<u>Debit</u>	<u>Credit</u>
Cash (\$7,200 + \$180)	\$ 7,380	
Accounts Receivable (\$3,500 - \$180)	3,320	
Supplies (\$900 - \$900)	0	
Equipment (\$15,000 + \$900 - \$90)	15,810	
Accumulated Depreciation—Equipment		\$3,000
Accounts Payable		5,950
Salaries and Wages Payable (\$600 - \$600)		0
Unearned Revenue		1,500
Common Shares		10,000
Retained Earnings		4,160
Service Revenue		8,000
Salaries and Wages Expense (\$3,600 - \$600)	3,000	
Advertising Expense (\$800 + \$30)	830	
Utilities Expense (\$310 - \$30)	280	
Depreciation Expense	700	
Maintenance and Repairs Expense (\$1,200 + \$90)	<u>1,290</u>	
	<u>\$32,610</u>	<u>\$32,610</u>

PROBLEM 3-17

(a)

1.	Jan. 1	Supplies.....	4,100	
		Cash.....		4,100
	Dec. 31	Supplies Expense	2,200	
		Office Supplies.....		2,200
2.	Aug. 1	Prepaid Insurance.....	6,000	
		Cash.....		6,000
	Dec. 31	Insurance Expense	2,500	
		Prepaid Insurance.....		2,500
		(\$6,000 X 5/12 = \$2,500)		
3.	Nov.15	Cash.....	1,200	
		Service Revenue		1,200
	Dec. 31	Service Revenue	400	
		Unearned Revenue		400
		(\$1,200 X 1/3 = \$400)		
4.	Dec. 1	Cash.....	1,100	
		Rent Revenue.....		1,100
	Dec. 31	Rent Revenue	550	
		Unearned Rent Revenue		550
		(\$1,100 / 2 = \$550)		

PROBLEM 3-17 (Continued)

- (b) It is possible to initially record prepayments as assets in some divisions or departments of a business, while recording them as expenses in others. Management could do this intentionally. This might also be done as a result of management's decision to allow staff to continue the practices under which they were originally trained. For example, recording of prepayments might be different among divisions or departments of a business in order to accommodate certain corporate cultures following mergers, or simply to avoid staff errors from changes in practices. The adjustment process at the end of the accounting period accommodates for the differences in practices and ensures the proper reporting of balances at the end of each of the accounting periods, irrespective of the differences in the original recording entries.

The GAAP foundational concept of comparability (consistency) does not apply to methods of recording prepayments since the same financial results are achieved on the company's financial statements. Comparability (consistency) is required for accounting policies, and methods of accounting for prepayments are not accounting policies.

RESEARCH AND FINANCIAL ANALYSIS

RA 3-3 ERP

An Enterprise Resource Planning (ERP) software system is an integrated real-time computer system that uses a single database with integrated modules for such areas of operations as accounting, human resources, logistics, production, capital asset management, and treasury functions. Full use of such a system offers the potential for a fully integrated system response to various transactions ranging from customer orders to supplier purchases to new staff hires. When the use of such systems is combined with web-based software and executive decision support software, it becomes a powerful and progressive operational and management tool.

ERP systems have gained attention recently because they represent a big stride forward in allowing companies to operate as an integrated whole as opposed to each functional area of a company operating somewhat independently and often causing goal incongruence in the process. Earlier systems often consisted of each functional area using a stand-alone system which may have worked well for that particular function but did not necessarily encourage focus on the overall picture. It was difficult and time consuming to coordinate and process activities that involved more than one sub-system and reports generated out of each system for the same activities often did not directly or easily tie into each other. The fact that each system often operated on its own database also meant that data was often duplicated by being stored in more than one system. This not only resulted in unnecessarily large amounts of data but also resulted in problems with respect to data integrity. A piece of data that got updated in one system might not be updated in another system resulting in inconsistent results and reports. The common database used in ERP's allows more flexible reporting as all functions can design and use reports that fit their needs while using many of the same data elements.

Companies find ERP's so useful because they have allowed operating, recording, processing and reporting functions to become more streamlined, saving personnel time and effort and resulting in higher quality, more efficient reporting. They often result in reduced inventory levels, shorter lead times for customers, and other operational advantages.

As discussed above, the pros of ERP systems include better integration of related functions, lower data requirements, better data integrity, and more flexible and higher quality reporting.

RA 3-3 ERP (Continued)

The cons of ERP systems include high cost, both in terms of initial installation and implementation and ongoing support and maintenance. There is a requirement for more highly trained staff and for more cross training among staff with respect to related functional areas. The results from an integrated system are only as good as the inputs and thus it is critical that the various functional areas come to some agreement with respect to issues of data definitions, policies and procedures surrounding updating common data elements, etc. This can be a time consuming and difficult process, and requires the commitment and involvement of top management in order to be successful. One of the problems with ERP systems is that the integration is often not as smooth and flawless as one would hope. These systems can be extremely complex and the integration issues alone can be overwhelming to deal with. Another con is that although the single database is a positive thing in most contexts, it can be a negative in the sense that “all the eggs are in one basket.” If there is a problem with the database in an ERP system, it affects all functional areas, rather than being isolated to one area as in the case when each function is operating with a separate system.

RA 3-4 – XBRL

(a) XBRL stands for **eXtensible Business Reporting Language** which is a form of electronic communication that is used and recognized internationally. Being an open standard, it works with most software and hardware systems. The way that it works is rather than presenting financial statements and information in text form (the form we are familiar with in pdf files), it provides an identifying tag for each unique piece of information. This allows the information to be easily stored, analyzed, processed and exchanged, assisting users with comparison analyses between companies, or trends of historical data from the same company.

(b) The advantages are the following:

- For preparers - It is more efficient to prepare the reports, and the information is more accurate. Using XRBL eliminates the manual re-entering information into a different reporting format.
- Investors can use the information in this format to more quickly analyze and compare across companies and with the same company. It is a more useable format than pdf files for corporate reports, again eliminating the re-keying of information.
- The XRBL language is an open language allowing it to be easily and freely adopted around the world. It can handle different foreign languages and accounting standards.
- It can easily be used for other types of reporting including: earnings press releases and corporate tax returns, for example.

The disadvantages for using XRBL are as follows:

- There will be upfront costs to implement this change for preparers and training required.
- The tagging process is not error free since the user must determine (judgmentally in some cases) how the financial item will be tagged and mapped. Initially this could result in a misrepresentation of data, errors and a lack of comparability.
- Preparers may have to customize tags if the nature of the financial data is unique and does not fit within the standard conventions. This will make it more complex and less comparable across companies.

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CHAPTER 4

REPORTING FINANCIAL PERFORMANCE

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing Assignments
1. Income measurement concepts.	1, 2, 3, 4		1	1
2. Measuring income.	5, 6	1, 2		
3. Discontinued operations.	7	3, 4	2, 3, 4,	3
4. Statements of income/comprehensive income.	8, 9, 10, 11, 12	1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	4, 5
5. Statement of retained earnings/changes in equity.	13, 14, 15	10, 15, 16	4, 8, 9, 10, 11, 12, 15,	
6. Disclosure and analysis.	9, 11, 12, 16, 17	11, 12, 13, 14, 17, 18	3, 4, 13, 14, 16	
7. Differences between IFRS and ASPE.				6
8. Cash basis*	18	19	17, 18	2

* This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E4-1	Comprehensive income.	Simple	15-20
E4-2	Comprehensive income.	Moderate	30-40
E4-3	Discontinued operations.	Moderate	15-20
E4-4	Discontinued operations.	Moderate	20-25
E4-5	Calculation of net income.	Simple	15-20
E4-6	Calculation of net income – proprietorship.	Simple	15-20
E4-7	Income statement items.	Simple	15-20
E4-8	Multiple-step and single-step.	Moderate	30-40
E4-9	Combined single-step.	Moderate	25-30
E4-10	Multiple-step statement, with retained earnings.	Simple	30-40
E4-11	Single-step income statement.	Moderate	20-25
E4-12	Multiple-step and single-step.	Simple	30-35
E4-13	Multiple-step and unusual items.	Moderate	30-35
E4-14	Condensed income statement.	Moderate	20-25
E4-15	Retained earnings statement.	Simple	20-25
E4-16	Comprehensive income.	Simple	15-20
E4-17	Earnings per share.	Simple	20-25
E4-18	Earnings per share.	Moderate	15-20
*E4-19	Cash and accrual basis.	Moderate	10-15
P4-1	Earnings management.	Moderate	20-25
P4-2	Discontinued operations.	Moderate	35-45
P4-3	Multiple-step income statement	Moderate	40-45
P4-4	Irregular items.	Moderate	35-45
P4-5	Single-step income statement and retained earnings statement.	Simple	25-30
P4-6	Unusual items.	Moderate	20-25
P4-7	Identification of income statement weaknesses.	Moderate	30-40
P4-8	Multiple- and single-step income statement and retained earnings.	Moderate	45-55
P4-9	Irregular items.	Moderate	30-35
P4-10	Comprehensive combined statement of income and retained earnings.	Moderate	45-50
P4-11	Income statement and irregular items.	Moderate	35-45
P4-12	All-inclusive vs. current operating.	Moderate	35-45
P4-13	Income statement and irregular items.	Moderate	25-35
P4-14	Identification of income statement deficiencies.	Simple	35-45

ASSIGNMENT CHARACTERISTICS TABLE (CONTINUED)

Item	Description	Level of Difficulty	Time (minutes)
P4-15	Retained earnings statement, correction of error and change in accounting principle.	Moderate	25-35
P4-16	Identify income statement deficiencies.	Simple	20-25
*P4-17	Cash and accrual basis.	Moderate	35-40
P4-18	Cash and accrual basis.	Complex	40-50

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 4-1

- (a) Pharmedical would have higher gross profit percentage because it follows a cost differentiation strategy. Sunmart is a discount retailer and follows a low cost/high volume strategy.**
- (b) Pharmedical would have higher selling expense as a percentage of sales because it likely has a sizeable sales force that markets and educates customers about its products.**
- (c) Pharmedical would have higher research and development expense as a percentage of sales because it develops medications to prevent and treat diseases.**
- (d) Either Sunmart or Pharmedical may have higher net income. Pharmedical has higher gross profit percentage, meaning a higher amount of every dollar of sales is available to cover operating expenses. However, Pharmedical also has higher selling expense as a percentage of sales and research and development expense as a percentage of sales, meaning a higher amount of every dollar of sales is needed to cover operating expenses.**

BRIEF EXERCISE 4-2

- (a) The information provided by Jae appears to be of lower quality. Several of Jae's major customers experienced cash flow problems in 2014 for reasons that may persist. However, Jae decreased the estimated percentage of its outstanding accounts receivable that will become uncollectible. Jae also did not disclose any additional information in the notes to financial statements regarding potentially higher risk of uncollectible accounts. Jae's reporting of accounts receivable (net) and bad debt expense appears to be incomplete and may be biased, resulting in lower quality of information.**
- (b) The earnings reported by Jae will likely be discounted by the capital markets. Financial statement users including investors and analysts will likely note that the company's accounts receivable turnover ratio decreased significantly in 2014, but that bad debt expense as a percentage of sales decreased in the same period. This is a signal of potentially overly optimistic valuation of accounts receivable, resulting in lower bad debt expense and earnings which may not be replicated.**

BRIEF EXERCISE 4-3

- (a) From the perspective of an investor, the earnings reported by Environmental appear to be of lower quality. The company's net income includes a significant gain on sale of investments, which means that earnings do not reflect primarily the earnings generated from ongoing core business activities. Environmental also changed from the declining balance method to the straight line method for depreciation of its equipment (which is non-typical for companies in the industry). According to GAAP, the depreciation method must reflect the pattern in which the economic benefits are expected to be consumed. Unless Environmental's pattern of use of the equipment is better reflected by the straight line method, the measurement of equipment (net) and depreciation expense may be biased.
- (b) The earnings reported by Environmental will likely be discounted by the capital markets. Financial statement users including investors and analysts will likely note that the company's net income included a significant gain generated from non-core business activities, and lower depreciation expense as a result of change to a depreciation method which may be biased. As a result, content of the earnings reported appears to be lower quality, and the capital markets will likely discount the earnings reported.

BRIEF EXERCISE 4-4

- (a) The earnings reported by Faz appear to be of lower quality. Faz's expected value of the loss on the lawsuit and the liability of \$500,000 appears to be based on the estimate of the lawyer who provided the second opinion. Faz's management sought the second legal opinion because of the potentially significant impact of the original estimate on 2014 net income. This is a form of earnings management, and is unethical because the resulting financial statements included an estimate that was not reliably determined and based on all of the reliable information available at the time. After representing Faz and disputing the claim, Faz's original legal counsel would have provided the most informed and reliable estimate of the loss and the liability.**
- (b) If Faz did not fully disclose all estimates of the loss on the lawsuit and the liability, the capital markets may not immediately see through Faz's attempt to mask the underlying economic reality. However, the earnings reported by Faz will likely be discounted by the capital markets eventually, if or when it becomes apparent that the estimate of the loss on the lawsuit and the liability were in fact biased and misleading.**

BRIEF EXERCISE 4-5

- (a) Income from continuing operations = Income from operations + Gain on sale of FV-NI investments – Income tax on income from continuing operations = \$15,000 + \$1,000 – \$4,000 = \$12,000**
- (b) Net income = Income from continuing operations – Loss from operation of discontinued division (net of tax) – Loss from disposal of discontinued division (net of tax) = \$12,000 – \$3,000 – \$5,000 = \$4,000**
- (c) Other comprehensive income = Unrealized holding gain – OCI (net of tax) = \$1,000**
- (d) Comprehensive income = Net income + Other comprehensive income = \$4,000 + \$1,000 = \$5,000**
- (e) Under ASPE, other comprehensive income and comprehensive income do not apply, and investments that are not quoted in an active market are accounted for at cost.**

BRIEF EXERCISE 4-6

- (a) Net income = \$18,000 (dividend revenue)**
- (b) Other comprehensive income = \$25,000**
- (c) Comprehensive income = Net income + Other comprehensive income = \$18,000 + \$25,000 = \$43,000**
- (d) Accumulated other comprehensive income = Beginning balance + Other comprehensive income = \$0 + \$25,000 = \$25,000**

BRIEF EXERCISE 4-7

Under IFRS, a component of an entity comprises operations, cash flows, and financial elements that can be clearly distinguished from the rest of the enterprise. Selling the corporate-owned stores to a franchisee would not qualify for discontinued operations treatment, because the corporate-owned stores are not a separate major line of business.

Under ASPE, selling the corporate-owned stores would also not qualify for discontinued operations treatment. Although the corporate-owned stores are a component of the enterprise, the franchisor is still involved with the franchised stores as they continue to provide product to them as well as advertising and support. The cash flows of the franchisor are still affected by those of the franchisee since the franchisor collects monthly fees based on revenues.

BRIEF EXERCISE 4-8

- (a) The \$100,000 (net of tax) loss from operation of the discontinued division, and the \$200,000 (net of tax) loss on impairment of net assets of the discontinued division should be shown in the discontinued operations section of the income statement for the year ended December 31, 2014. The discontinued operations section follows income from continuing operations. Under ASPE, the assets and liabilities related to the discontinued manufacturing division should be segregated on the balance sheet according to their nature (e.g. current assets related to the discontinued manufacturing division should be presented as current assets held for sale/related to discontinued operations, and noncurrent assets related to the discontinued manufacturing division should be presented as noncurrent assets held for sale/related to discontinued operations).
- (b) Under IFRS, the \$100,000 (net of tax) loss from operation of the discontinued division, and the \$200,000 (net of tax) loss on impairment of net assets of the discontinued division should be also be shown in the discontinued operations section of the income statement for the year ended December 31, 2014. However, on the balance sheet, all assets and liabilities related to the discontinued manufacturing division should be presented as held for sale, and classified as current assets and current liabilities, respectively.

BRIEF EXERCISE 4-9

Taylor Corporation
Income Statement
For the Year Ended December 31, 2014

Revenues

Net sales revenue	\$2,780,000
Investment revenue	<u>103,000</u>
Total revenues	<u>2,883,000</u>

Expenses

Cost of merchandise sold	2,190,000
Salaries and wages	317,000
Advertising and promotion	60,000
Entertainment	37,000
Rent	48,000
Utilities	21,000
Interest	<u>76,000</u>
Total expenses	<u>2,749,000</u>

Income before income tax **134,000**

Income tax **40,000**

Net income **\$94,000**

Earnings per share **\$9.40**

BRIEF EXERCISE 4-10

Taylor Corporation
Income Statement
For the Year Ended December 31, 2014

Net sales revenue		\$2,780,000
Cost of goods sold		<u>2,190,000</u>
Gross profit		590,000
Operating expenses		
Selling expenses	\$272,000	
Administrative expenses	<u>211,000</u>	<u>483,000</u>
Income from operations		107,000
Other revenues and gains		
Investment income		<u>103,000</u>
		210,000
Other expenses and losses		
Interest expense		<u>76,000</u>
Income before income tax		134,000
Income tax		<u>40,000</u>
Net income		<u><u>\$ 94,000</u></u>
Earnings per share		<u><u>\$9.40</u></u>

BRIEF EXERCISE 4-11

Blue Collar Corporation
Partial Statement of Comprehensive Income
For the Year Ended December 31, 2014

Income from continuing operations		\$12,600,000
Discontinued operations		
Loss from operation of discontinued restaurant division (net of tax)	\$315,000	
Loss from disposal of restaurant division (net of tax)	<u>89,000</u>	<u>404,000</u>
Net income		12,196,000

Other comprehensive income		
Items that may be reclassified subsequently to net income or loss:		
Unrealized gain on fair value-OCI investments (net of tax)		<u>43,000</u>

Comprehensive income	<u>\$12,239,000</u>

Earnings per share:	
Income from continuing operations	\$1.26
Discontinued operations	<u>(.04)</u>
Net income	<u>\$1.22</u>

Note: Earnings per share information related to comprehensive income is not required under IFRS.

BRIEF EXERCISE 4-12

Big and Rich Corporation
Partial Statement of Income
For the year Ended December 31, 2014

Income from operations	\$7,300,000
Other expenses and losses	
Loss from tornado	1,270,000
Loss on disposal of building	<u>250,000</u>
Income before income tax	5,780,000
Income tax	<u>1,734,000</u>
Net Income	<u><u>\$4,046,000</u></u>
Earnings per share:	<u><u>\$.81</u></u>

BRIEF EXERCISE 4-13

Your Pal Postcard Company Limited Statement of Changes in Shareholders' Equity For the Year Ended December 31, 2014

	<u>Total</u>	<u>Common Shares</u>	<u>Compre- hensive Income</u>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Income</u>
Beginning balance	\$1,750,000	\$600,000		\$900,000	\$250,000
Comprehensive income					
Net income*	50,000		50,000	50,000	
Other comprehensive income					
Unrealized gain – OCI**	60,000		60,000		60,000
Dividends	(300,000)			(300,000)	
Comprehensive income			<u>\$ 110,000</u>		
Ending balance	<u>\$1,560,000</u>	<u>\$600,000</u>		<u>\$650,000</u>	<u>\$310,000</u>

*(\$900,000 – \$750,000 – \$100,000).

**May be reclassified subsequently to net income or loss.

BRIEF EXERCISE 4-14

Global Corporation
Statement of Retained Earnings
For the Year Ended December 31, 2014

Balance, January 1	\$ 529,000
Add: Net income	<u>1,646,000</u>
	2,175,000
Less: Dividends	<u>660,000</u>
Balance, December 31	<u><u>\$1,515,000</u></u>

BRIEF EXERCISE 4-15

Global Corporation
Statement of Retained Earnings
For the Year Ended December 31, 2014

Balance, January 1, as reported	\$ 529,000
Correction for overstatement of depreciation in 2011 (net of tax)	
	<u>25,000</u>
Balance, January 1, as adjusted	554,000
Add: Net income	<u>1,646,000</u>
	2,200,000
Less: Dividends	<u>660,000</u>
Balance, December 31	<u><u>\$1,540,000</u></u>

BRIEF EXERCISE 4-16

The number of common shares outstanding at December 31, 2014 is 44,000 (40,000 – 8,000 + 12,000)

Weighted average number of shares:

January 1 – April 1	40,000 X 3/12 =	10,000
April 1 – August 31	32,000 X 5/12 =	13,333
August 31 – Dec. 31	44,000 X 4/12 =	<u>14,667</u>
		<u>38,000</u>

BRIEF EXERCISE 4-17

$$\frac{\$1,600,000 - \$400,000}{120,000} = \underline{\$10.00} \text{ per share}$$

*BRIEF EXERCISE 4-18

(a)

Cash Receipts from Customers	- Beginning accounts receivable + Ending accounts receivable	= Revenue on accrual basis

$$\$152,000 - 13,000 + 18,600 = \$157,600$$

(b)

Cash payments for operating expenses	+ Beginning prepaid expenses - Ending prepaid expenses	= Operating expenses on accrual basis

$$\$97,000 + 17,500 - 23,200 = \$91,300$$

SOLUTIONS TO EXERCISES

EXERCISE 4-1 (15-20 minutes)

**Reach Out Card Company Limited
Statement of Comprehensive Income
For the Year Ended December 31, 2014**

Net sales revenue	\$1,200,000
Cost of goods sold	<u>750,000</u>
Gross profit	450,000
Operating expenses	
Selling and administrative expenses	320,000
Gain on disposal of building	<u>250,000</u>
 Net income	 380,000
Other comprehensive income	
Items that may be reclassified	
subsequently to net income or loss:	
Unrealized gain on fair-value OCI	
investments	<u>18,000</u>
 Comprehensive income	 <u><u>\$398,000</u></u>

EXERCISE 4-2 (30-40 minutes)

(a) Calculation of net income:

Income from operations		\$375,000
Other revenues and gains		
Gain on sale of equipment	\$27,000	
Gain on sale of land	1,000*	
Gain on sale of FV-NI investments	33,000	
Gain on sale of fair value through OCI investments	<u>71,000**</u>	<u>132,000</u>
		507,000
Other expenses and losses		
Loss on disposal of building	68,000	
Unrealized loss on FV-NI investments	<u>54,000</u>	<u>122,000</u>
Income before income tax		385,000
Income tax		<u>99,000</u>
Net income		<u><u>\$286,000</u></u>

(b) Calculation of retained earnings:

Balance, January 1	\$410,000
Add: Net income	<u>286,000</u>
	696,000
Add: Reclassification adjustment for realized gains on land	<u>74,000</u>
Balance, December 31	<u><u>\$770,000</u></u>

* \$216,000 - \$215,000

** \$55,000 + (\$126,000 - \$110,000)

EXERCISE 4-2 (Continued)

- (c) **Accumulated other comprehensive income (AOCI) had a balance of \$129,000 (\$74,000 + \$55,000) at January 1, 2014. The balance in AOCI at December 31, 2014 is zero.**

\$74,000 of the opening AOCI balance was related to revaluation surplus (land). This amount represents the cumulative revaluation gains/(losses) related to the piece of land accounted for under the revaluation model. Under the revaluation model, revaluation gains are recorded as revaluation surplus (OCI), and accumulated in AOCI until the asset is retired or disposed of. Pike sold the piece of land in 2014, and upon sale, Pike would have recorded a gain on sale of the land equal to \$1,000 [the difference between the proceeds (\$216,000) and the carrying amount of the land (\$215,000)]. The balance in AOCI related to previous revaluations of the land to fair value should be transferred directly to retained earnings in the year of sale (2014).

\$55,000 of the opening AOCI balance was related to cumulative unrealized gains/(losses) related to measurement of fair value through OCI (FV-OCI) investments at fair value. Pike sold the related FV-OCI investments in 2014, and upon sale, Pike would have captured any unrealized gain to date (\$126,000 - \$110,000) in OCI, and transferred the cumulative unrealized gains/(losses) from OCI [\$55,000 + (\$126,000 - \$110,000)] to net income (according to company policy).

EXERCISE 4-2 (Continued)

- (d) Under ASPE, other comprehensive income is not recognized. The revaluation model is not permitted under ASPE. Investments that are traded in an active market are accounted for as FV-NI under ASPE.

Calculation of net income:

Income from operations		\$375,000
Other revenues and gains		
Gain on sale of equipment	\$27,000	
Gain on sale of land	75,000*	
Gain on sale of FV-NI investments	<u>49,000**</u>	<u>151,000</u>
		526,000
Other expenses and losses		
Loss on disposal of building	68,000	
Unrealized loss on FV-NI investments	<u>54,000</u>	<u>122,000</u>
Income before income tax		404,000
Income tax		<u>99,000</u>
Net income		<u>\$305,000</u>

Calculation of retained earnings:

Balance, January 1	\$465,000
Add: Net income	<u>305,000</u>
Balance, December 31	<u>\$770,000</u>

* \$74,000 + (\$216,000 - \$215,000)

** \$33,000 + (\$126,000 - \$110,000)

Note : under ASPE, retained earnings at January 1, 2014 would be \$465,000 (\$410,000 + \$55,000), because all investments designated as FV-OCI under IFRS would be accounted for as FV-NI under ASPE because the investments are traded in an active market. Under ASPE, all previously recognized unrealized gains/(losses) on those investments (\$55,000) would have been recorded in net income and closed to retained earnings in those years.

EXERCISE 4-3 (20-25 minutes)

(a)

2014:

Loss Jan. 1 to Sept. 30 (net of tax)	\$1,900,000
Loss Sept. 30 to Dec. 31 (net of tax)	700,000
Estimated impairment loss on net assets (net of tax)	<u>150,000</u>
Total loss from discontinued operations	<u><u>\$2,750,000</u></u>

(b)

Discontinued operations (2014):

Loss from operation of discontinued subsidiary, net of tax	\$2,600,000
Loss on impairment of net assets, net of tax	<u>150,000</u>
Loss from discontinued operations	<u><u>\$2,750,000</u></u>

(c) The correction of the gain or loss from disposal of the subsidiary reported in 2014 should be reported in 2015 in the discontinued operations section of the income statement, net of tax and with separate EPS disclosure, supported by an explanation in a note to the financial statements. The correction would receive the same treatment as a change in estimate.

(d) Under IFRS, all assets and liabilities related to the discontinued subsidiary should be presented as held for sale, and classified as current assets and current liabilities, respectively.

EXERCISE 4-3 (Continued)

- (e) Under ASPE, the solution to parts (a) through (c) would remain the same, except that earnings per share calculations are not required under ASPE. On the balance sheet, the assets and liabilities relating to the discontinued subsidiary should be segregated according to their nature (e.g. current assets related to the discontinued subsidiary should be presented as current assets held for sale/related to discontinued operations, and noncurrent assets related to the discontinued subsidiary should be presented as noncurrent assets held for sale/related to discontinued operations).**

EXERCISE 4-4 (20-25 minutes)

(a) The income statement and related footnote are as follows:

Income from continuing operations before income tax		\$144,000
Income tax		<u>43,200</u>
Income from continuing operations		100,800
Discontinued operations (Note XX)		
Income from operations of the discontinued		
Blue Division, less applicable		
income tax of \$1,800	\$4,200	
Loss from impairment of assets of		
discontinued operations, less applicable		
income tax recovery of \$6,000	<u>(14,000)</u>	<u>(9,800)</u>
Net income		<u>\$91,000</u>

Note XX—Discontinued Operations. On October 5, 2014, the board of directors decided to dispose of the Blue Division by auction.

(Note that earnings per share calculations are not required under ASPE)

- (b) The office equipment would be shown separately on the balance sheet as part of noncurrent assets as “noncurrent assets held for sale/related to discontinued operations”. The assets would be valued at the lower of their carrying amount and fair value less costs to sell. In this case, this means the office equipment would be remeasured to \$5,000, which is its estimated selling price, net of costs to sell.
- (c) Under IFRS, the office equipment should be presented as held for sale, and classified as current assets on the balance sheet.

EXERCISE 4-4 (Continued)

- (d) If Diamond did not have a formal plan in place to dispose of Blue Division, Blue Division would not qualify for treatment as a discontinued operation, and the related net loss (after tax) of \$9,800 should be included in income from continuing operations. Based on that presentation and disclosure, an investor would appropriately interpret that the net loss relates to operations that are expected to continue.**

Without a formal plan in place to dispose of the Blue Division, presenting the Blue Division as a discontinued operation is not in compliance with GAAP and it would not be faithfully representative. Diamond's quality of earnings would be low quality, as loss/earnings related to operations that are expected to continue would be inappropriately excluded from income from continuing operations.

EXERCISE 4-5 (15-20 minutes)

Calculation of net income:

Increase in assets:	$\$90,000 + \$70,000 + \$167,000 - \$27,000 =$	$\$300,000$
Increase in liabilities:	$\$(76,000) + 22,000 + \$82,000 =$	<u>28,000</u>
Increase in shareholders' equity:		<u><u>\$272,000</u></u>

Change in shareholders' equity accounted for as follows:

Net increase		$\$272,000$
Increase in common shares	$\$125,000$	
Increase in contributed surplus	$75,000$	
Decrease in retained earnings due to dividend declaration	<u>$(19,000)$</u>	
Net increase accounted for		<u>181,000</u>
Increase in retained earnings due to net income		<u><u>\$ 91,000</u></u>

EXERCISE 4-6 (15-20 minutes)

	<u>Jan. 1,</u> <u>2014</u>	<u>Dec. 31,</u> <u>2014</u>	<u>Change</u>
Cash	$\$23,000$	$\$ 20,000$	$(\$ 3,000)$
Accounts receivable	$19,000$	$36,000$	$17,000$
Other assets (derived)	<u>$33,000$</u>	<u>$45,000$</u>	<u>$12,000$</u>
Total assets	$75,000$	$101,000$	$26,000$
Liabilities (1/1/14 derived)	<u>$(37,000)$</u>	<u>$(41,000)$</u>	<u>$(4,000)$</u>
Capital (12/31/14 derived)	<u><u>$\\$38,000$</u></u>	<u><u>$\\$ 60,000$</u></u>	<u><u>$\\$22,000$</u></u>

Calculation of net income:

Capital account Dec. 31, 2014		$\$60,000$
Capital account Jan. 1, 2014		<u>38,000</u>
Increase		$22,000$
Add: Withdrawals made	$\$11,000$	
Less: Cash investment made	<u>$5,000$</u>	<u>6,000</u>
Net income		<u><u>\$28,000</u></u>

EXERCISE 4-7 (15-20 minutes)

(a) Total net revenue:

Sales revenue		\$490,000
Less: Sales discounts	\$ 17,800	
Sales returns and allowances	<u>22,400</u>	<u>40,200</u>
Net sales revenue		449,800
Dividend revenue		91,000
Rent revenue		<u>8,500</u>
Total net revenue		<u><u>\$549,300</u></u>

(b) Net income:

Net revenue (from a)		\$549,300
Expenses:		
Cost of goods sold		384,400
Selling expenses		79,400
Administrative expenses		82,500
Interest expense		<u>2,700</u>
Total expenses		<u>549,000</u>
Income before income tax		300
Income tax		<u>100</u>
Net income		<u><u>\$200</u></u>

(c) Dividends declared:

Ending retained earnings	\$74,000
Beginning retained earnings	<u>114,400</u>
Net decrease	(40,400)
Less: net income	<u>200</u>
Dividends declared	<u><u>\$40,600</u></u>

EXERCISE 4-7 (Continued)

ALTERNATE SOLUTION

Beginning retained earnings	\$114,400
Add net income	<u>200</u>
	114,600
Less: dividends declared (derived) *	<u>40,600</u>
Ending retained earnings	<u><u>\$74,000</u></u>

* Dividends declared must be \$40,600
(\$114,600 – \$74,000)

EXERCISE 4-8 (30-40 minutes)

(a)

Multiple-Step Form
Flett Tire Repair Corporation
Income Statement
For the Year Ended December 31, 2014

Sales Revenue			
Sales revenue			\$930,000
Less: Sales returns and allowances			<u>15,000</u>
Net sales revenue			915,000
Cost of Goods Sold			
Merchandise inventory, January 1, 2014		\$120,000	
Purchases	\$600,000		
Less purchase discounts		<u>10,000</u>	
Net purchases		590,000	
Add freight-in		<u>14,000</u>	<u>604,000</u>
Total merchandise available for sale			724,000
Less merchandise inventory, December 31, 2014			<u>137,000</u>
Cost of goods sold			<u>587,000</u>
Gross profit			328,000
Operating Expenses			
Selling expenses			
Sales salaries and wages	71,000		
Depreciation expense—store equipment		18,000	
Store supplies expense		<u>9,000</u>	98,000
Administrative expenses			
Administrative salaries and wages		39,000	
Depreciation expense—building		28,500	
Office supplies expense		<u>9,500</u>	<u>77,000</u>
Income from operations			153,000
Other Revenues and Gains			
Dividend revenue			20,000
Gain on sale of equipment			<u>5,500</u>
			178,500

EXERCISE 4-8 (Continued)

Other Expenses and Losses

Interest expense	9,000	
Loss from flood damage	<u>50,000</u>	<u>59,000</u>
Income before income tax		119,500
Income tax		<u>29,875</u>
Net Income		<u><u>\$89,625</u></u>

(b)

Single-Step Form
Flett Tire Repair Corporation
Income Statement
For the Year Ended December 31, 2014

Revenues

Net sales revenue	\$915,000
Dividend revenue	20,000
Gain on sale of equipment	<u>5,500</u>
Total revenues	<u>940,500</u>

Expenses

Merchandise inventory consumed*	587,000
Salaries and wages	110,000
Depreciation expense	46,500
Supplies expense	18,500
Loss from flood damage	50,000
Interest expense	<u>9,000</u>
Total expenses	<u>821,000</u>

Income before income tax	119,500
Income tax	<u>29,875</u>
Net income	<u><u>\$ 89,625</u></u>

* This is the same as cost of goods sold.

EXERCISE 4-8 (Continued)

(c) Single-step:

- 1. Simplicity and conciseness.**
- 2. Probably better understood by user.**
- 3. Emphasis on total costs and expenses and net income.**
- 4. Does not imply priority of one expense over another.**

Multiple-step:

- 1. Provides more information through segregation of operating and non-operating items.**
- 2. Expenses are matched with related revenue.**
- 3. Highlights components of income used for ratio analysis (e.g., Cost of Goods Sold)**
- 4. Showing expenses by function requires allocation of costs between functions. More judgement is required.**
- 5. Showing expenses by nature does not require allocation between functions.**

EXERCISE 4-9 (25-30 minutes)

(a) **Presley Inc.**
Income Statement
for the Year Ended December 31, 2014

Revenues

Sales revenue	\$1,900,000
Rent revenue	40,000
Gain from expropriation	95,000
Total revenues	<u>2,035,000</u>

Expenses

Cost of goods sold	850,000
Selling expenses	300,000
Administrative expenses	240,000
Loss from flood damage	60,000
Total expenses	<u>1,450,000</u>

Income from continuing operations before income tax	585,000
Income tax	<u>187,000</u>
Income from continuing operations	398,000

EXERCISE 4-9 (Continued)

Discontinued operations:

Loss from operation of discontinued Ace Division
(net of \$25,000 income tax recovery)

50,000

Net income

\$348,000

(b)

Presley Inc.

Combined Income Statement and Statement of Retained Earnings For the Year Ended December 31, 2014

Revenues

Sales revenue

\$1,900,000

Rent revenue

40,000

Gain from expropriation

95,000

Total revenues

2,035,000

Expenses

Cost of goods sold

850,000

Selling expenses

300,000

Administrative expenses

240,000

Loss from flood damage

60,000

Total expenses

1,450,000

Income from continuing operations before income tax

585,000

Income tax

187,000

Income from continuing operations

398,000

Discontinued operations:

Loss from operation of discontinued Ace Division
(net of \$25,000 income tax recovery)

50,000

Net income

\$348,000

Retained earnings, January 1

600,000

948,000

Less: Cash dividends

70,000

Retained earnings, December 31

\$878,000

EXERCISE 4-10 (35-40 minutes)

(a) **Gottlieb Corp.**
Statement of Comprehensive Income
For the Year Ended December 31, 2014

Sales Revenue		
Net sales revenue		\$1,300,000
Cost of goods sold		<u>780,000</u>
Gross profit		520,000
Operating Expenses		
Selling expenses	\$65,000	
Administrative expenses	<u>48,000</u>	<u>113,000</u>
Income from operations		407,000
Other Revenues		
Dividend revenue	20,000	
Interest income	<u>7,000</u>	<u>27,000</u>
		434,000
Other Expenses and Losses		
Loss on inventory due to decline in net realizable value (NRV)	80,000	
Loss on sale of equipment	<u>35,000</u>	
Loss from expropriation	<u>60,000</u>	<u>175,000</u>
Income before income tax		259,000
Income tax		<u>64,750</u>
Net income		194,250
Other comprehensive income		
Items that may be reclassified subsequently to net income or loss:		
Unrealized gain on fair value through OCI investments (net of \$10,500 income tax)		<u>31,500</u>
Comprehensive income		<u><u>\$225,750</u></u>

EXERCISE 4-10 (Continued)

(b) Gottlieb Corp.
Excerpt from Statement of Changes in Equity
For the Year Ended December 31, 2014

Retained earnings balance, January 1, as reported	\$ 980,000
Correction for overstatement of net income in prior period (depreciation error) (net of tax of \$13,750)	<u>(41,250)</u>
Balance, January 1, as restated	938,750
Add: Net income	<u>194,250</u>
	1,133,000
Less: Dividends declared	<u>45,000</u>
Retained earnings balance, December 31	<u><u>\$1,088,000</u></u>

(c)

Retained Earnings.....	41,250	
Income Tax Payable/Receivable...	13,750	
Accumulated Depreciation.....		55,000

(d)

Under ASPE, other comprehensive income is not recognized. All investments designated as fair value through OCI (FV-OCI) under IFRS would be accounted for as fair value through net income (FV-NI) under ASPE as long as they trade in an active market. Under ASPE, the unrealized gain on FV-OCI investments of \$42,000 would be included in net income for the year ended December 31, 2014. As well, all previously recognized unrealized gains/(losses) on the related investments would have been recorded in net income and closed to retained earnings in those prior years. This would result in a different balance in retained earnings at December 31, 2013.

EXERCISE 4-11 (20-25 minutes)

Geneva Inc. Income Statement For Year Ended December 31, 2014

Sales revenue	\$2,100,000
Less sales discounts	<u>15,000</u>
Net sales revenue	<u>2,085,000</u>
Expenses	
Cost of goods sold	420,000
Selling expenses	336,000
Administrative expenses	84,000
Interest expense	<u>20,000</u>
Total expenses	<u>860,000</u>
Income before income tax	1,225,000
Income tax	<u>306,250</u>
Net income	<u>\$ 918,750</u>
Earnings per share	<u>\$61.25</u>

Determination of amounts:

Administrative

expenses = 20% of cost of good sold
 \$84,000 = 20% of \$420,000

Gross sales X 4% = administrative expenses
Gross sales = (\$84,000 / 4%) = \$2,100,000

Selling expenses = 4/5 of cost of goods sold
 = 4/5 X \$420,000
 = \$336,000

Per share \$61.25 (\$918,750 , 15,000)

EXERCISE 4-12 (30-35 minutes)

(a)

Multiple-Step Format

Singh Corp.

Income Statement

For the Year Ended December 31, 2014

(In thousands, except earnings per share)

Sales revenue				\$306,500
Cost of goods sold				<u>58,570</u>
Gross profit				247,930
Operating Expenses				
Selling expenses				
Salaries and wages	\$67,280			
Advertising	42,500			
Depreciation expense	6,480			
Freight-out	<u>2,290</u>	\$118,550		
Administrative expenses				
Salaries and wages	3,900			
Rent	16,200			
Depreciation expense	<u>3,560</u>	<u>23,660</u>	<u>142,210</u>	
Income from operations				105,720
Other Revenues and Gains				
Rent revenue				<u>15,230</u>
				120,950
Other Expenses and Losses				
Interest expense				<u>1,860</u>
Income before income tax				119,090
Income tax				<u>35,727</u>
Net income				<u>\$83,363</u>
Earnings per share				<u>\$2.73*</u>

***(\$83,363,000 , 30,550,000)**

EXERCISE 4-12 (Continued)

(b) **Single-Step Format**
Singh Corp.
Income Statement
For the Year Ended December 31, 2014
(In thousands, except earnings per share)

Revenues	
Sales revenue	\$ 306,500
Rent revenue	<u>15,230</u>
Total revenues	<u>321,730</u>
 Expenses	
Merchandise inventory consumed	58,570
Salaries and wages	71,180
Depreciation	10,040
Rent	16,200
Freight-out	2,290
Advertising	42,500
Interest expense	<u>1,860</u>
Total expenses	<u>202,640</u>
 Income before income tax	119,090
Income tax	<u>35,727</u>
Net income	<u>\$ 83,363</u>
 Earnings per share	<u>\$2.73</u>

EXERCISE 4-12 (Continued)

- (c) An investor interested in information about operating vs. non-operating items would prefer the multiple-step format because income from operations is calculated before other revenues and gains are added and before other expenses and losses are subtracted, in arriving at net income. An investor interested in information about the various areas of the company's operations would prefer classification of expenses by function. Both income statement formats and both methods of classifying expenses arrive at the same amount of income before income tax and net income. However, single-step format and classification of expenses by nature tend to be more straightforward, requiring no judgement in allocating revenues and expenses between functions. Multiple-step format and classification of expenses by function tend to require more judgement in allocating revenues and expenses between functions.**

EXERCISE 4-13 (30-35 minutes)

Big Track Trucking Company Limited
Income Statement
For the Year Ended December 31, 2014

Sales Revenue		
Sales revenue		\$1,380,000
Less: Sales returns and allowances	\$150,000	
Sales discounts	<u>45,000</u>	<u>195,000</u>
Net sales revenue		1,185,000
Cost of goods sold		<u>621,000</u>
Gross profit		564,000
Operating Expenses		
Selling expenses	194,000	
Administrative expenses	97,000	
Depreciation expense	<u>60,000</u>	<u>351,000</u>
Income from operations		213,000
Other Revenues and Gains		
Interest revenue		<u>86,000</u>
		299,000
Other Expenses and Losses		
Interest expense		60,000
Loss from storm damage		<u>150,000</u>
Income before income tax		89,000
Income tax		<u>22,250</u>
Net income		<u><u>\$ 66,750</u></u>
Earnings per share:		<u><u>\$0.45</u></u>

EXERCISE 4-14 (20-25 minutes)

Holland Rose Corporation Income Statement For the Year Ended December 31, 2014

Net sales revenue		\$4,162,000
Cost of goods sold		<u>2,665,000</u>
Gross profit		1,497,000
Selling expense	\$636,000	
Administrative expense	<u>491,000</u>	<u>1,127,000</u>
Income from operations		370,000
Other revenue	240,000	
Other expense	<u>246,000</u>	<u>6,000</u>
Income before income tax		364,000
Income tax*		<u>91,000</u>
Net income		<u><u>\$ 273,000</u></u>

Earnings per share**:
\$3.03

Supporting calculations:

* Income tax (\$364,000 x 25%) = \$91,000

** \$273,000 divided by 90,000 common shares.

Sales Revenue		
Sales revenue		\$4,275,000
Less: Sales discounts	\$34,000	
Sales returns and allowances	<u>79,000</u>	<u>113,000</u>
Net sales revenue		<u><u>\$4,162,000</u></u>

EXERCISE 4-14 (Continued)

Cost of Goods Sold:

Inventory, Jan. 1, 2014		\$535,000
Purchases	\$2,786,000	
Less purchase returns and allowances	(15,000)	
Less purchase discounts	<u>(27,000)</u>	
Net purchases	2,744,000	
Add freight-in	<u>72,000</u>	<u>2,816,000</u>
Total goods available for sale		3,351,000
Less inventory, Dec. 31, 2014		<u>686,000</u>
Cost of Goods Sold		<u><u>\$2,665,000</u></u>

Selling expenses:

Salaries and wages	\$284,000	
Sales commission expense	83,000	
Entertainment expense	69,000	
Advertising expense	54,000	
Freight-out	93,000	
Depreciation of sales equipment	36,000	
Telephone and internet expense	<u>17,000</u>	<u>\$636,000</u>

Administrative Expenses:

Salaries and wages	\$346,000	
Office expense	33,000	
Insurance expense	24,000	
Depreciation of office equipment	48,000	
Utilities expenses	32,000	
Miscellaneous expense	<u>8,000</u>	<u>\$491,000</u>

Other Expenses:

Interest expense	\$176,000	
Loss on disposal of equipment	<u>70,000</u>	<u>\$246,000</u>

EXERCISE 4-15 (20-25 minutes)

Holiday Corporation
Statement of Retained Earnings
For the Year Ended December 31, 2014

Balance, January 1, as reported	\$270,000*
Correction for depreciation error (net of \$14,250 income tax recovery)	(42,750)
Retroactive adjustment for change in inventory method (net of \$9,250 income tax)	<u>27,750</u>
Balance, January 1, as adjusted	255,000
Add net income	<u>330,000**</u>
	585,000
Deduct dividends declared	<u>100,000</u>
Balance, December 31	<u>\$485,000</u>

* $(\$55,000 + \$135,000 + \$160,000) - (\$30,000 + \$50,000)$

** $[\$440,000 - (25\% \times \$440,000)]$

EXERCISE 4-16 (15-20 minutes)

Rainy Day Umbrella Corporation
Statement of Changes in Equity
For the Year Ended December 31, 2014 (all amounts in thousands)

	<u>Total</u>	<u>Comp. Income</u>	<u>Preferred Shares</u>	<u>Common Shares</u>	<u>Contr. Surplus</u>	<u>Retained Earnings</u>	<u>Acc. Other Comp. Inc.</u>
Beginning Balance	\$24,740		\$2,006	\$5,291	\$2,225	\$13,692	\$1,526
Comprehensive Income:							
Net income	4,352	\$4,352				4,352	
Other comprehensive income							
Unrealized holding gain*	348	<u>348</u>					348
Comprehensive Income		<u>\$4,700</u>					
Dividends to shareholders:							
Preferred	(23)					(23)	
Common	(7)					(7)	
Issue of Common shares	<u>170</u>			<u>170</u>			
Ending Balance	<u>\$29,580</u>		<u>\$2,006</u>	<u>\$5,461</u>	<u>\$2,225</u>	<u>\$18,014</u>	<u>\$1,874</u>

*May be reclassified subsequently to net income or loss.

EXERCISE 4-16 (Continued)

Rainy Day Umbrella Corporation
Balance Sheet (Partial)
December 31, 2014 (all amounts in thousands)

Share capital:	
Preferred shares	\$ 2,006
Common shares	<u>5,461</u>
Total share capital	<u>7,467</u>
Contributed surplus	<u>2,225</u>
Total paid-in capital	9,692
Retained earnings	18,014
Accumulated other comprehensive income	<u>1,874</u>
Total shareholders' equity	<u><u>\$29,580</u></u>

EXERCISE 4-17 (20-25 minutes)

Calculation of net income:

2014 net income after tax	\$24,000,000
2014 net income before tax	
[\$24,000,000 , (1 – .25)]	32,000,000
Add back loss from discontinued operations	<u>15,000,000</u>
Income from continuing operations	47,000,000
Income tax (25% X \$47,000,000)	<u>11,750,000</u>
Income before discontinued operations	<u>35,250,000</u>
Discontinued operations	
Loss from operations	15,000,000
Less applicable income tax reduction	<u>3,750,000</u>
	<u>11,250,000</u>
Net income	<u>\$24,000,000</u>

Net income	\$24,000,000
Less cumulative preferred dividends (8% of \$4,500,000)	<u>360,000</u>
Income available for common	23,640,000
Common shares	<u>10,000,000</u>
Earnings per share	<u>\$2.36</u>

Income statement presentation

Earnings per share:	
Continuing operations	\$3.49 ^a
Discontinued operations	<u>(1.13)^b</u>
Net income	<u>\$2.36</u>

$$^a \frac{\$35,250,000 - \$360,000}{10,000,000} = \$3.49$$

$$^b \frac{\$15,000,000 \times (1-.25)}{10,000,000} = \$1.13$$

EXERCISE 4-18 (15-20 minutes)

Net income:

Income from continuing operations		
before tax		\$23,650,000
Income tax (30%)		<u>7,095,000</u>
Income from continuing operations		16,555,000
Discontinued operations		
Loss before tax	\$3,225,000	
Less income tax recovery	<u>967,500</u>	<u>2,257,500</u>
Net income		<u><u>\$14,297,500</u></u>

Preferred dividends declared

(\$10,750,000 x10%): \$ 1,075,000

Weighted average common shares outstanding:

12/31/13–3/31/14 (3,600,000 x 3/12)	900,000
4/1/14–12/31/14 (4,000,000 x 9/12)	<u>3,000,000</u>
Weighted average	<u><u>3,900,000</u></u>

Earnings per share:

Income from continuing operations	\$3.97*
Discontinued operations	<u>(.58)**</u>
Net income	<u><u>\$3.39***</u></u>

*(\$16,555,000 – \$1,075,000) , 3,900,000.

**\$2,257,500 , 3,900,000.

***(\$14,297,500 – \$1,075,000) , 3,900,000.

***EXERCISE 4-19 (10-15 minutes)**

**(a) Portmann Corp.
Income Statement (Cash Basis)
For the Year Ended December 31,**

	<u>2012</u>	<u>2013</u>
Sales	\$320,000	\$515,000
Expenses	<u>225,000</u>	<u>247,000</u>
Net income	<u>\$ 95,000</u>	<u>\$268,000</u>

**(b) Portmann Corp.
Income Statement (Accrual Basis)
For the Year Ended December 31,**

	<u>2012</u>	<u>2013</u>
Sales*	\$510,000	\$445,000
Expenses**	<u>277,000</u>	<u>230,000</u>
Net income	<u>\$233,000</u>	<u>\$215,000</u>

***2012:** $\$320,000 + \$160,000 + \$30,000 = \$510,000$
2013: $\$355,000 + \$90,000 = \$445,000$
****2012:** $\$185,000 + \$67,000 + \$25,000 = \$277,000$
2013: $\$40,000 + \$135,000 + \$55,000 = \$230,000$

TIME AND PURPOSE OF PROBLEMS

Problem 4-1 (Time 20-25 minutes)

Purpose—to provide the student an illustration of how earnings can be managed. The case allows students to see the effects of warranty expense timing on the trend of income and illustrates the potential use of accruals to smooth earnings.

Problem 4-2 (Time 35-45 minutes)

Purpose—to provide the student with a discontinued operations problem that requires discussion of balance sheet and income statement disclosure along with an illustration of the income statement presentation. The student is also required to discuss the factors applied to justify the use of the discontinued operations treatment and the impact on users of financial information.

Problem 4-3 (Time 40-45 minutes)

Purpose—to provide the student with an opportunity to prepare an income statement and a statement of retained earnings. A number of special items such as loss from discontinued operations, unusual items, and unusual losses are presented in the problem for analysis purposes. The problem also requires calculating the tax effect of a special item from a net-of-tax amount.

Problem 4-4 (Time 35-45 minutes)

Purpose—to provide the student with an opportunity to analyze a number of transactions and to prepare a partial income statement. The problem includes discontinued operations, unusual item, and earnings per share. The student must also prepare a statement of retained earnings and then discuss the impact of GAAP classification rules on the assessment of the quality of earnings.

Problem 4-5 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to prepare an income statement and statement of retained earnings using the single-step format.

Problem 4-6 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of conditions where unusual item classification is appropriate. In this problem, it should be emphasized that in situations where unusual item classification is not permitted, a classification as an unusual item may still be employed.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 4-7 (Time 30-40 minutes)

Purpose—to provide the student with the opportunity to comment on deficiencies in a single-step income statement. This case includes discussion of unusual items, tax reassessments, and ordinary gains and losses. The problem provides a broad overview to a number of items discussed in the textbook.

Problem 4-8 (Time 45-55 minutes)

Purpose—to provide the student with the opportunity to prepare a multiple-step and single-step income statement and a statement of retained earnings from the same underlying information. The problem emphasizes the differences between the multiple-step and single-step income statement.

Problem 4-9 (Time 30-35 minutes)

Purpose—to provide the student with a problem on the income statement treatment of (1) a usual but infrequently occurring charge, (2) an unusual item and its related tax effect, (3) a change in estimate, and (4) earnings per share. The student is required to identify the proper income statement treatment and to provide the rationale for such treatment. A revised income statement must be prepared.

Problem 4-10 (Time 45-50 minutes)

Purpose—to provide the student the opportunity to distinguish between different scenarios involving discontinued operations, unusual items and changes in accounting policy. Three different scenarios are proposed and a combined statement of income and retained earnings must be prepared. The problem involves intraperiod tax allocation. This problem is comprehensive.

Problem 4-11 (Time 35-45 minutes)

Purpose—to provide the student with the opportunity to correct a multi-step income statement. The student must determine which of the items presented should be presented in the income statement and must prepare a proper income statement. A combined statement of income and retained earnings is also required. This statement includes an adjustment to the beginning retained earnings balance for a change in policy. The student must also discuss the purpose of intraperiod tax allocation.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 4-12 (Time 35-45 minutes)

Purpose—to provide the student with an understanding of the difference between the current operating and all-inclusive income statement. In addition, the student is to comment on the income statement presentation of a number of special items. Presentation of the proper earnings per share is also emphasized. A revised income statement presentation is required as well as a revised statement of retained earnings.

Problem 4-13 (Time 25-35 minutes)

Purpose—to provide the student with a problem to determine the reporting of several items, which may get special treatment as irregular items. This is a good problem for a group assignment.

Problem 4-14 (Time 35-45 minutes)

Purpose—to provide the student with the opportunity to comment on deficiencies in an income statement format. The student is required to comment on such items as inappropriate heading, incorrect classification of special items, proper net of tax treatment, and presentation of per share data. The student is also required to prepare a correct income statement.

Problem 4-15 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to prepare a statement of changes in equity. A number of special items must be reclassified and reported in the income statement. This problem illustrates the fact that ending retained earnings is unaffected by the choice of disclosing items in the income statement or the statement of retained earnings, although the income reported would be different.

Problem 4-16 (Time 20-25 minutes)

Purpose—to provide the student a real company context to identify factors that make income statement information useful. The focus is on overly aggregated information in a condensed income statement. Additional detail would seem to be warranted either on the face of the statement or with reference to the notes.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

*Problem 4-17 (Time 35-40 minutes)

Purpose—to provide an opportunity for the student to prepare and compare (a) cash basis and accrual basis income statements, (b) cash basis and accrual basis balance sheets, and (c) to discuss the weaknesses of cash basis accounting.

*Problem 4-18 (Time 40-50 minutes)

Purpose—to provide an opportunity for the student to determine income on an accrual basis. The student is asked to write a letter indicating what was done to arrive at an accrual basis net income.

SOLUTIONS TO PROBLEMS

PROBLEM 4-1

- (a) Earnings management may be defined as the process of targeting certain earnings levels (whether current or future) or desired earnings trends and then working backwards to determine what has to be done to ensure that these targets are met. Earnings management often involves planned timing of revenues, expenses, gains and losses to smooth out bumps in earnings. In many cases, earnings management is used to increase income in the current year at the expense of income in future years. For example, companies prematurely recognize revenue before it is earned in order to boost income. Earnings management can also be used to decrease current income in order to increase income in the future. This is done through the creation of reserves by using unrealistic assumptions to estimate liabilities for such items as sales returns, loan losses, and warranty returns.

- (b) Proposed Accounting Income:

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Income before					
warr. expense				\$43,000	\$43,000
Warr. expense				<u>8,000</u>	<u>2,000</u>
Income	<u>\$20,000</u>	<u>\$25,000</u>	<u>\$30,000</u>	<u>\$35,000</u>	<u>\$41,000</u>

Assuming the same income before warranty expense for both 2014 and 2015 and total warranty expense over the 2-year period of \$10,000, this proposed accounting results in steadily increasing income over the two-year period.

PROBLEM 4-1 (Continued)

(c) Appropriate Accounting Income:

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Income before					
warr. expense				\$43,000	\$43,000
Warr. expense				<u>5,000</u>	<u>5,000</u>
Income	<u>\$20,000</u>	<u>\$25,000</u>	<u>\$30,000</u>	<u>\$38,000</u>	<u>\$38,000</u>

The appropriate accounting would be to record \$5,000 in 2014, resulting in income of \$38,000. However, with the same amount of warranty expense in 2015, Grace no longer shows an increasing trend in income. Thus, by taking more expense in 2014, Grace can maintain its growth trend in income.

- (d) If Grace records a larger, more conservative warranty expense this year, and provides full disclosure of the warranty accrual, a potential investor should see through the company's attempts to mask the underlying economic reality that the growth trend in income may not be maintained. The investor may view the company's larger warranty accrual as an attempt to manage earnings. The investor may be wary of the company's accounting practices and quality of earnings. The investor may discount the value of the company's shares or forego investing in the company altogether.

PROBLEM 4-2

- (a) The Rocketeer Division's assets should be identified separately on Campbell Corporation's balance sheet as of May 31, 2014 as held for sale current assets and carried at fair value less costs to sell of \$87 million.
- (b) The operating loss must be reported as a separate component after income from continuing operations. The operating loss up to year end is presented as a loss from discontinued operations on a net of tax basis. The division assets would be measured at the lower of carrying value and fair value less costs to sell. The related loss would be presented as a separate component of discontinued operations, on a net of tax basis. Separate earnings per share figures for the discontinued operations are also required under IFRS.

All figures in thousands, except earnings per share:

Income from continuing operations (Note-):		\$XXX
Loss from operation of the Rocketeer Division less applicable income tax recovery of \$2,500	\$(7,500)	
Loss on impairment of Rocketeer Division assets less applicable income tax recovery of \$2,250*	<u>(6,750)</u>	<u>\$(14,250)</u>
Net income		<u>\$XXX</u>
* Book value of assets	\$96,000,000	
Fair value less costs to sell	<u>87,000,000</u>	
Impairment loss	\$(9,000,000)	
Applicable tax (25%)	<u>2,250,000</u>	
After-tax loss	\$(6,750,000)	

(Note to instructor: We have presented the calculations in this format in order for the student to better understand how the loss on impairment was calculated. Other formats are acceptable.)

PROBLEM 4-2 (Continued)

- (c) The operating loss from June 1- July 5, 2014 is reported as a separate component after income from continuing operations. The operating loss is presented as a loss from discontinued operations on a net of tax basis. The loss on the disposal of the division assets would be presented as a separate component of discontinued operations, on a net of tax basis. The amounts would be disclosed on a comparative basis with the results of the year ended 2014. Separate earnings per share figures for the discontinued operations are also required under IFRS.

All figures in thousands, except earnings per share:

Income from continuing operations (Note-):		\$XXX
Loss from operation of the Rocketeer Division less applicable income tax recovery of \$175	\$(525)	
Loss from disposal of the Rocketeer Division assets less applicable income tax recovery of \$750	<u>(2,250)</u>	<u>\$(2,775)</u>
Net income		<u><u>\$XXX</u></u>

- (d) The Rocketeer Division financial results should be shown as a discontinued operation according to the following factors:
- Management has “formally” decided to dispose of the Rocketeer Division
 - The division represents a separate major line of business (as noted – it is a major portion of the company’s operations). It is a separate component of the entity and is operationally distinct, where the operations, cash flows, and financial elements are clearly distinguishable from the rest of the enterprise (as evidenced by the measurement of the division losses) – thus the accountants will be able to measure the loss from operations and disposition of the assets.
 - There is an active program to find a buyer (negotiations are in process)

PROBLEM 4-2 (Continued)

Management could argue the following points against using discontinued operations treatment:

- **Changes to the plan are possible or likely, and**
- **The assets are not available for immediate sale in their current state**

Management would usually prefer using the discontinued operations treatment. This separates the financial results of the division from continuing operations and allows users to concentrate on continuing financial results and to assess management performance on the more profitable parts of the business. This also allows users to see the unprofitable impact of the Rocketeer Division on prior years' results since comparative figures are presented. For a user, showing discontinued operations at the bottom of the income statement after income tax expense and with its own earnings per share information provides more information about the quality and recurrence of earnings.

PROBLEM 4-3

**Rolling Thunder Corp.
Statement of Comprehensive Income
For the Year Ended December 31, 2014**

Sales revenue		\$36,500,000
Less cost of goods sold		<u>28,500,000</u>
Gross profit		8,000,000
Less selling and administrative expenses		<u>4,700,000</u>
Income from operations		3,300,000
Other revenues and gains		
Interest income	\$170,000	
Gain on sale of fair value-net income investments	<u>110,000</u>	<u>280,000</u>
		3,580,000
Other expenses and losses		
Loss on impairment of goodwill	520,000	
Loss from flood damage	<u>390,000</u>	<u>910,000</u>
Income from continuing operations before income tax		2,670,000
Income tax expense:		
For 2014	797,500	
Tax assessment related to 2012	<u>500,000</u>	<u>1,297,500</u>
Income from continuing operations		1,372,500
Discontinued operations		
Loss from operations, net of income tax recovery of \$55,000	165,000	
Loss from disposal, net of income tax recovery of \$87,500	<u>262,500</u>	<u>427,500</u>
Net income		\$ 945,000
Other comprehensive income		
Items that may be reclassified subsequently to net income or loss:		
Unrealized gain on fair value-OCI investments, net of income tax of \$80,000		<u>240,000</u>
Comprehensive income		<u>\$ 1,185,000</u>

PROBLEM 4-3 (Continued)

Earnings per share:

Income from continuing operations

\$ 1.62^a

Discontinued operations

(0.53)^b

Net income

\$ 1.09^c

$$\begin{array}{l} \text{a} \quad \frac{\$1,372,500 - \$70,000}{800,000 \text{ shares}} = \$1.62^* \end{array}$$

$$\begin{array}{l} \text{b} \quad \frac{(\$427,500)}{800,000 \text{ shares}} = (\$0.53) \end{array}$$

$$\begin{array}{l} \text{c} \quad \frac{\$ 945,000 - \$70,000}{800,000 \text{ shares}} = \$1.09 \end{array}$$

***rounded to make it
add**

PROBLEM 4-4

**(a) Lanestar Inc.
Income Statement (Partial)
For the Year Ended December 31, 2014**

Income from continuing operations before income tax		\$1,738,500*
Income tax		<u>505,350**</u>
Income from continuing operations		1,233,150
Discontinued operations:		
Loss on disposal of recreational division	\$115,000	
Less applicable income tax reduction	<u>34,500</u>	<u>80,500</u>
Net income		<u>\$1,152,650</u>

Earnings per share:	
Income from continuing operations	\$15.41
Discontinued operations	<u>(1.00)</u>
Net income	<u>\$14.41</u>

*Calculation of income from continuing operations before income tax:		
As previously stated		\$1,790,000
Loss on sale of fair value-net income investments		(107,000)
Gain on proceeds of life insurance policy (\$100,000 – \$46,000)		54,000
Error in calculation of depreciation:		
As calculated (\$54,000 , 6)	\$9,000	
Corrected (\$54,000 – \$9,000) , 6	<u>7,500</u>	<u>1,500</u>
As restated		<u>\$1,738,500</u>

**Calculation of income tax:		
Income from continuing operations before income tax		\$1,738,500
Non-taxable income (gain on life insurance)		<u>(54,000)</u>
Taxable income		1,684,500
Tax rate		<u>X .30</u>
Income tax expense		<u>\$505,350</u>

PROBLEM 4-4 (Continued)

(b)

Lanestar Inc.
Excerpt from Statement of Changes in Equity
For the Year Ended December 31, 2014

Retained earnings, January 1, 2014, as reported		\$2,540,000
Correction of depreciation overstatement (net of tax of \$900) *	2,100	
Retroactive adjustment for change in inventory method (net of tax of \$12,000) **	<u>28,000</u>	<u>30,100</u>
Retained earnings, January 1, 2014, as adjusted		\$2,570,100
Add: Net income		<u>1,152,650</u>
		3,722,750
Less: Dividends declared		<u>175,000</u>
Retained earnings, December 31, 2014		<u><u>\$3,547,750</u></u>

*** Error in calculation of depreciation:**

As calculated (\$54,000 , 6)	\$9,000
Corrected (\$54,000 – \$9,000) , 6	<u>7,500</u>
Understatement of net income per year	1,500
	<u>X 2</u>
Total understatement of beginning retained earnings	3,000
After-tax understatement (\$3,000 X [1-30%])	<u><u>\$2,100</u></u>

**Understatement of 2012 income	\$60,000
Overstatement of 2013 income	<u>(20,000)</u>
Net understatement of beginning retained earnings	<u><u>\$40,000</u></u>
After-tax understatement (\$40,000 X [1-30%])	<u><u>\$28,000</u></u>

PROBLEM 4-4 (Continued)

- (c) Proper classification of items on the income statement includes appropriate separation of discontinued operations from continuing operations. Discontinued operations are presented separately to provide predictive value. By separating the results of operations that are being discontinued from ongoing operations, users can assess ongoing operations and more easily predict future performance. Results from continuing operations usually have greater significance for predicting future performance than do results from nonrecurring activities.**

Appropriate separation of operating from non-operating items (e.g. separation of revenues and expenses from gains and losses) also helps users to assess past performance and profitability based on recurring, regular transactions, and to predict sustainability of earnings.

Proper disclosure of other items on the income statement (e.g. government assistance, loss on impairment of goodwill, loss on inventory due to decline in NRV, income tax) also helps users to assess the quality, recurrence, and sustainability of earnings and management's performance.

PROBLEM 4-5

**McLean Corporation
Income Statement
For the Year Ended December 31, 2014**

Revenues	
Net sales revenue*	\$1,368,000
Gain on sale of land	30,000
Rent revenue	<u>18,000</u>
Total revenues	<u>1,416,000</u>
Expenses	
Cost of goods sold**	785,000
Selling expenses	432,000
Administrative expenses	<u>99,000</u>
Total expenses	<u>1,316,000</u>
Income before income tax	100,000
Income tax	<u>25,000</u>
Net income	<u><u>\$ 75,000</u></u>

* (\$1,400,000 – \$14,500 – \$17,500 = \$1,368,000)

****Cost of goods sold:**

Inventory, January 1		\$ 89,000
Purchases	\$810,000	
Less purchase discounts	<u>10,000</u>	
Net purchases	800,000	
Add freight-in	<u>20,000</u>	<u>820,000</u>
Cost of goods available for sale		909,000
Less inventory, December 31		<u>124,000</u>
Cost of goods sold		<u><u>\$785,000</u></u>

PROBLEM 4-5 (Continued)

McLean Corporation
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained earnings, January 1	\$ 260,000
Plus net income	<u>75,000</u>
	335,000
Less: cash dividends	<u>45,000</u>
Retained earnings, December 31	<u><u>\$ 290,000</u></u>

PROBLEM 4-6

- 1. Present loss separately if material, because the users of the financial statements would not expect losses from earthquakes.**
- 2. Since the company appears to issue bonds/shares frequently and since finance costs are generally separately presented, these might be grouped and presented with finance costs.**
- 3. Present loss separately if material, because hail storms and therefore losses due to hailstorms are rare in the locality.**
- 4. The cumulative unrealized holding gain/(loss) – OCI previously reported for these investments should be reported in net income separately as gain/(loss) on sale of investments. However, the gain/loss on sale of investments is not classified as unusual.**
- 5. The cumulative unrealized holding gain/(loss) – OCI for this investment should be reported in net income separately as gain/(loss) on sale of investments. However, the gain/loss on sale of investments is not classified as unusual.**
- 6. Present related gain/(loss) on sale of land separately if material, because the company is not in the business of selling land.**
- 7. May present costs separately since the company does not frequently relocate. This would provide greater transparency since relocation is not a normal part of operations.**
- 8. Loss might be grouped with finance costs since the company appears to enter into this type of transaction frequently.**

PROBLEM 4-6 (Continued)

- 9. The loss is not an infrequent occurrence taking into account the environment in which the entity operates. Whether this is separately presented would be a judgement call since these floods happen every three years. The entity knows this and could avoid the loss by insuring itself against this type of loss. If insured, the insurance expense would be booked every year as an ongoing cost of doing business.**
- 10. Present gain/(loss) on sale of land separately if material, because sale of land is not part of normal recurring activities.**

Note that as a general rule, if the item is unusual and material, (consider size, nature and frequency), the item is presented separately but included in income from continuing operations. If the item is unusual and immaterial, the item is combined with other items in income from continuing operations. There is a tradeoff here between additional disclosures of relevant information and too much disclosure which might result in information overload. Certain items are already separately disclosed as part of other comprehensive income. These items are presented net of tax whereas unusual items are presented before tax. Care should be taken to review the current accounting standards as certain specific items may be required to be presented separately. Note that IFRS and ASPE mandate that different items be separately presented. These standards change over time.

PROBLEM 4-7

The Income Statement of Klein Corporation contains the following weaknesses in classification and disclosure:

- 1. Sales taxes: sales taxes have been erroneously added to gross sales revenue. Failure to deduct these taxes directly from customer billings results in a deceptive inflation of the amount of sales revenue. These taxes should be deducted from gross sales revenue because the Corporation acts as an agent in collecting and remitting such taxes to the government.**
- 2. Purchase discounts: purchase discounts should not be treated as revenue by being lumped with other revenue such as dividend revenue and interest income. A purchase discount is more logically a reduction of the cost of purchases because revenue is not created by purchasing goods and paying for them. In a cash transaction, cost is measured by the amount of the cash paid. In a credit transaction, however, cost is measured by the amount of cash required to settle the obligation immediately. The discount should reduce the cost of goods purchased to the amount of cash that would be required to settle the obligation immediately.**
- 3. Recoveries of accounts written off in prior years: these collections should be credited to allowance for doubtful accounts unless the direct write-off method was used in accounting for bad debt expense, in which case the recovery would offset the current year's bad debt expense. Generally, the direct write-off method is not allowed, as it does not result in faithfully representative valuation of accounts receivable (net).**

PROBLEM 4-7 (Continued)

- 4. Freight-in and freight-out: freight-out is an expense of selling and is therefore reported properly in the statement, although freight-in is a cost related to the acquisition of merchandise for resale, and should have been included in the calculation of cost of goods sold. The value assigned to inventory should represent the value of the economic resources given up in obtaining goods and readying them for sale.**
- 5. Appropriation of retained earnings for possible inventory losses: appropriations of retained earnings should not be treated as operating expenses. An appropriation is not an operating expense because it is only an anticipated loss from a future event. It does not represent a reduction in future benefits. It is a notification to shareholders that \$3,800 of earnings retained for use in the business is designated for a stated purpose and is not available for dividends.**
- 6. Loss on discontinued styles: this type of loss, though often substantial, should not be treated as an unusual item because it is apparently typical of the customary business activity of the corporation. It should be reported and included as an operating expense.**
- 7. Loss on sale of fair value-net income investments: this item should be presented as a separate component of income from operations. As the company appears to trade investments frequently, the loss should not be labelled as unusual.**
- 8. Loss on sale of warehouse: this item may be presented separately since the company is not in the business of selling warehouses. However, it should be shown at the pre-tax amount.**

PROBLEM 4-7 (Continued)

- 9. Tax reassessments for 2013 and 2012: the company may wish to show this as a separate line item within income tax expense for greater transparency. Reassessments are not uncommon as companies often have to interpret the income tax act. These interpretations are audited by the government and the tax auditors may have differing interpretations which may result in reassessments.**
- 10. Income tax: the income statement is missing income tax as an expense.**
- 11. The amount identified as Income before unusual items should be labelled income from operations.**

PROBLEM 4-8

(a) Reid Corporation
Income Statement
For the Year Ended June 30, 2014

Sales Revenue			
Sales revenue			\$1,928,500
Less: Sales discounts	\$31,150		
Sales returns and allowances	<u>62,300</u>	<u>93,450</u>	
Net sales revenue			1,835,050
Cost of Goods Sold			<u>1,071,770</u>
Gross profit			763,280
Operating Expenses			
Selling expenses			
Sales commissions expense	\$97,600		
Salaries and wages expense	56,260		
Advertising expense	28,930		
Entertainment expense	14,820		
Freight-out	21,400		
Telephone and internet expense	9,030		
Depreciation expense	4,980		
Maintenance and repairs expense	6,200		
Supplies expense	4,850		
Miscellaneous expense	<u>4,715</u>	248,785	
Administrative expenses			
Salaries and wages expense	7,320		
Maintenance and repairs expense	9,130		
Depreciation expense	7,250		
Supplies expense	3,450		
Telephone and internet expense	2,820		
Miscellaneous expense	<u>6,000</u>	<u>35,970</u>	<u>284,755</u>
Income from operations			478,525
Other Revenues			
Dividend revenue			<u>38,000</u>
			516,525
Other Expenses			
Interest expense			<u>18,000</u>
Income before income tax			498,525
Income tax			<u>133,000</u>
Net income			<u>\$ 365,525</u>
Earnings per share			<u><u>\$1.98*</u></u>
(\$365,525 - \$9,000)/180,000 shares			

PROBLEM 4-8 (Continued)

(b)

Reid Corporation
Excerpt from Statement of Changes in Equity
For the Year Ended June 30, 2014

Retained earnings, July 1, 2013, as reported		\$292,000
Correction of depreciation understatement (net of tax)		<u>17,700</u>
Balance July 1, 2013 adjusted		\$274,300
Add: Net income		<u>365,525</u>
		639,825
Deduct:		
Dividends declared on preferred shares	9,000	
Dividends declared on common shares	<u>32,000</u>	<u>41,000</u>
Retained earnings, June 30, 2014		<u><u>\$598,825</u></u>

PROBLEM 4-8 (Continued)

(c) **Reid Corporation**
Income Statement
For the Year Ended June 30, 2014

Revenues

Net sales	\$1,835,050
Dividend revenue	<u>38,000</u>
Total revenues	<u>1,873,050</u>

Expenses

Raw materials and supplies consumed	\$482,970*
Increase in work-in-process and finished goods inventories (see note)	(112,900)
Employee benefit expense	871,180**
Advertising expense	28,930
Transportation expense	21,400
Maintenance and repairs expense	15,330
Entertainment expense	14,820
Depreciation expense	12,230
Telephone and internet expense	11,850
Miscellaneous expense	10,715
Finance costs	<u>18,000</u>
Total expenses	<u>1,374,525</u>

Net income before income tax	498,525
Income tax	<u>133,000</u>

Net income	<u>\$365,525</u>
Earnings per share	<u>\$1.98</u>

(\$365,525 - \$9,000)/ 180,000 shares

***\$474,670 + \$3,450 + \$4,850 = \$482,970**

**** \$97,600 + \$56,260 + \$7,320 + \$710,000 = \$871,180**

PROBLEM 4-8 (Continued)

Note: The functional classification includes the salaries and wages and all overhead costs incurred by function as well as the raw materials that went into production. However, to the extent that there are more of these costs in ending work-in-process and finished goods inventory than at the beginning of the period, the increase in those inventories must be deducted from the costs going into production to bring the amounts back to cost of goods sold in the period. If the work-in-process and finished goods inventories at the end of the period are lower than at the beginning of the period, then the additional costs must have been included in cost of good sold – therefore, a decrease in those inventories is added to the raw materials and other supplies consumed and the production salary and wage costs incurred to come to the cost of goods sold amount. Note that the change in raw materials inventory is not required as an adjustment because the figure we're adjusting is raw materials consumed or used in the period, not the cost of materials purchased.

PROBLEM 4-9

(a)

- 1. The usual but infrequently occurring charge of \$10,500,000 should be disclosed separately, assuming it is material. This charge should be shown as part of income from continuing operations and would not be reported net of tax. This item should be separately disclosed to inform the users of the financial statements that this item is not frequently recurring and therefore may not impact next year's results. Furthermore, trend comparisons may be misleading if such an item is not highlighted and adjustments made. The item should not be considered unusual because it is usual in nature.**
- 2. The loss of \$9,000,000 from discontinued operations should be reported net of tax in a separate section following income from continuing operations. The \$3,000,000 tax effect related to the discontinued operations should be reflected as part of the discontinued operations. The reason for the separate disclosure is much the same as that given above for the separate disclosure of the usual, but infrequently occurring item. Readers must be informed that certain revenue and expense items are not part of the future operations of the business and thus should be segregated from the results of operations that are continuing.**

PROBLEM 4-9 (Continued)

Under ASPE, the assets and liabilities related to the discontinued component should be segregated on the balance sheet according to their nature (e.g. current assets related to the discontinued component should be presented as current assets held for sale/related to discontinued operations, and noncurrent assets related to the discontinued component should be presented as noncurrent assets held for sale/related to discontinued operations). Under IFRS, all assets and liabilities related to the discontinued component should be presented as held for sale, and classified as current assets and current liabilities, respectively.

- 3. The “Adjustment required for correction of an error” is inappropriately labelled and also should not be reported in the statement of retained earnings. Changes in estimate should be handled in current and prospective periods through the income statement. Catch-up adjustments are not permitted.**
- 4. Under ASPE, EPS is not required to be disclosed since the shares are often held by one or a few shareholders who are closely related to the company and therefore have access to information beyond the financial statements. Having said this, the entity may choose to provide additional disclosures (beyond what is required by ASPE). Under IFRS, where discontinued operations are reported, IAS 33 states that basic EPS and diluted EPS may be presented on the statement of comprehensive income or in the notes. Because such importance is ascribed to this ratio, the profession believes it necessary to highlight the earnings per share figure. In this case it should report earnings per share for both income from continuing operations and discontinued operations.**

PROBLEM 4-9 (Continued)

(b)

California Tanning Salon Corp.
Combined Statement of Income and Retained Earnings
For the Year Ended December 31, 2014

	(\$000 omitted)
Net sales revenue	<u>\$640,000</u>
Cost and expenses:	
Cost of goods sold	500,000
Selling, general and administrative expenses (a)	55,500
Loss on inventory due to decline in NRV	10,500
Other, net (b)	<u>8,000</u>
	<u>574,000</u>
Income before income tax and discontinued operations	66,000
Income tax	<u>22,400</u>
Income before discontinued operations	43,600
Discontinued operations	
Loss from discontinued operations (net of tax of \$3,000)	<u>6,000</u>
Net income	37,600
Retained earnings, January 1	<u>141,000</u>
	178,600
Less: Dividends on common shares	<u>12,200</u>
Retained earnings, December 31	<u>\$166,400</u>

(a) $\$66,000 - \$10,500 = \$55,500$

(b) $\$17,000 - \$9,000 = \$8,000$

PROBLEM 4-10

SITUATION 1:

DC 5 Ltd.

**Combined Statement of Income and Retained Earnings
For the Year Ended December 31, 2014**

Sales revenue (\$5,700,000 - \$1,200,000)	\$4,500,000	
Cost of goods sold (\$2,900,000 - \$600,000)	<u>2,300,000</u>	
Gross profit	2,200,000	
Selling, general and administrative expenses (\$1,800,000 - \$450,000 - \$620,000)	<u>730,000</u>	
Income from operations	1,470,000	
Other expenses and losses		
Loss from tornado (\$490,000 + \$210,000)	<u>700,000</u>	
Income before income tax and discontinued operations	770,000	
Income tax	<u>231,000</u>	
Income before discontinued operations	539,000	
Discontinued operations		
Loss from disposal of apparel division (net of tax of \$186,000)	434,000	
Income from operations of apparel division (net of tax of \$45,000)	<u>105,000</u>	<u>329,000</u>
Net income		\$210,000
Retained earnings, January 1		<u>700,000</u>
Retained earnings, December 31		<u><u>\$910,000</u></u>

PROBLEM 4-10 (Continued)

SITUATION 2:

DC 5 Ltd.

Combined Statement of Income and Retained Earnings For the Year Ended December 31, 2014

Sales revenue	\$5,700,000
Cost of goods sold	<u>2,900,000</u>
Gross profit	2,800,000
Selling, general and administrative expenses*	<u>1,902,600</u>
Income from operations	897,400
Other losses:	
Loss from tornado	
(\$490,000 + \$210,000)	<u>700,000</u>
Income before income tax	197,400
Income tax	<u>59,220</u>
Net income	138,180
Retained earnings, January 1	<u>700,000</u>
Retained earnings, December 31	<u><u>\$838,180</u></u>

* The amount recorded as bad debt expense represents the 1.2% rate

(\$68,400 / \$5,700,000 = 1.2%)

Revised bad debt expense = \$5,700,000 X 3% =	\$171,000
Bad debt expense previously recorded	<u>68,400</u>
Increase in bad debt expense	<u><u>\$102,600</u></u>

PROBLEM 4-10 (Continued)

SITUATION 3:

DC 5 Ltd.

Combined Statement of Income and Retained Earnings For the Year Ended December 31, 2014

Sales revenue	\$5,700,000
Cost of goods sold	<u>2,900,000</u>
Gross profit	2,800,000
Selling, general and administrative expenses*	<u>1,800,000</u>
Income from operations	1,000,000
Other expenses:	
Loss from tornado (\$490,000 + \$210,000)	<u>700,000</u>
Income before income tax	300,000
Income tax	<u>90,000</u>
Net income	210,000
Retained earnings, January 1	<u>700,000</u>
 Retained earnings, December 31	 <u><u>\$910,000</u></u>

***Note: change in method of depreciation is a change in estimate and is accounted for prospectively.**

PROBLEM 4-11

**Hamad Corporation
Income Statement
For the Year Ended December 31, 2014**

Sales revenue		\$9,500,000
Cost of goods sold		<u>5,900,000</u>
Gross profit		3,600,000
Selling and administrative expenses	\$1,280,000*	
Loss on inventory due to decline in NRV	<u>112,000</u>	
Total operating expenses		<u>1,392,000</u>
Income before income tax and discontinued operations		2,208,000
Income tax		<u>662,400**</u>
Income before discontinued operations		1,545,600
Discontinued operations		
Loss from operation of discontinued segment (net of tax of \$69,429***)		<u>162,000</u>
Net income		<u><u>\$1,383,600</u></u>

* The 2013 sales commissions of \$20,000 are deducted.

** (30% of \$2,208,000).

*** The loss from operation of discontinued segment before tax
= \$162,000 / [100% - 30%] = \$231,429. Income tax = \$231,429
- \$162,000 = \$69,429.

PROBLEM 4-11 (Continued)

(b)

Hamad Corporation Statement of Income and Retained Earnings For the Year Ended December 31, 2014

Sales revenue		\$9,500,000
Cost of goods sold		<u>5,900,000</u>
Gross profit		3,600,000
Selling and administrative expenses	\$1,280,000	
Loss on inventory due to decline in NRV	<u>112,000</u>	
Total operating expenses		<u>1,392,000</u>
Income before income tax and discontinued operations		2,208,000
Income tax		<u>662,400</u>
Income before discontinued operations		1,545,600
Discontinued operations		
Loss from operation of discontinued segment (net of income tax recovery of \$69,429***)		<u>162,000</u>
Net income		\$1,383,600
Retained earnings, January 1, as reported	\$2,800,000	
Less: Decrease in prior year income due to error in recording sales commissions (net of tax of \$6,000)	<u>14,000</u>	
Retained earnings, January 1, as restated		<u>2,786,000</u>
		4,169,600
Less: Cash dividends		<u>700,000</u>
Retained earnings, December 31		<u>\$3,469,600</u>

Note: change in method of depreciation is a change in estimate and is accounted for prospectively.

PROBLEM 4-11 (Continued)

- (c) The income tax is allocated in the same manner as the underlying irregular item or adjustment to opening retained earnings. Since income tax is a major expense for companies, it is important to reflect the individual impact of tax for discontinued operations, and corrections of errors. This helps users assess the quality of earnings and their related tax impact. Intraperiod tax allocation also helps readers in trend analysis of income tax expense and income from continuing operations, by placing the current year amount on a comparable basis with prior years.**

PROBLEM 4-12

**ON TIME CLOCK COMPANY INC.
Statement of Comprehensive Income
For the Year Ended December 31, 2014**

Sales revenues		\$377,852
Less: Sales returns and allowances		<u>16,320</u>
Net sales revenue		361,532
Cost of goods sold		<u>198,112</u>
Gross profit		163,420
Selling expenses	\$41,850	
Administrative expenses	<u>32,142</u>	<u>73,992</u>
Income before income tax		89,428
Other revenues and gains		
Dividend revenue	40,000	
Gain on sale of long-term investments	<u>31,400</u>	71,400
Other expenses and losses		
Loss on expropriation		<u>13,000</u>
Income before income tax		147,828
Income tax *		<u>50,846</u>
Net income		96,982
Other comprehensive income		
Items that may be reclassified subsequently to net income or loss:		
Unrealized gain on fair value-OCI investments (net of tax*)		<u>23,618</u>
Comprehensive income		<u>\$120,600</u>

*** \$56,900/\$165,428 = 34.3956% tax rate**

PROBLEM 4-12 (Continued)

ON TIME CLOCK COMPANY INC. Statement of Changes in Equity For the Year Ended December 31, 2014

	Retained Earnings	Accumulated Other Comprehensive Income	Compre- hensive Income
Balance			
January 1	\$216,000	\$120,000	
Correction of prior year error	<u>(17,186)</u>		
Balance			
January 1 restated	198,814		
Net income	<u>96,982</u>		96,982
Unrealized gain on fair value-OCI investment*		<u>23,618</u>	<u>23,618</u>
			<u>\$120,600</u>
Balance			
December 31	<u>\$295,796</u>	<u>\$143,618</u>	

*May be reclassified subsequently to net income or loss.

PROBLEM 4-13

**Faldo Corp.
Income Statement (Partial)
For the Year Ended December 31, 2014**

Income from continuing operations before income tax			\$3,272,000*
Income tax			<u>818,000**</u>
Income from continuing operations			2,454,000
Discontinued operations			
Loss from operation of discontinued subsidiary	\$ 90,000		
Less applicable income tax reduction	<u>22,500</u>	\$67,500	
Loss from disposal of subsidiary	200,000		
Less applicable income tax reduction	<u>50,000</u>	<u>150,000</u>	<u>217,500</u>
Net income			<u><u>\$2,236,500</u></u>
Earnings per share:			
Income from continuing operations			\$24.54
Discontinued operations			<u>(2.18)</u>
Net income			<u><u>\$22.36</u></u>

***Income from continuing operations before income tax:**

As previously stated	\$2,710,000
Write-off of accounts receivable	(54,000)
Gain on sale of equipment	96,000
Settlement of lawsuit	<u>520,000</u>
Restated	<u><u>\$3,272,000</u></u>

****Income tax expense: \$3,272,000 X .25 = \$818,000**

Note: The prior year error related to the intangible asset was correctly charged to retained earnings.

PROBLEM 4-14

The deficiencies of the Amos Corporation income statement are as follows:

a)

- 1. The heading is inappropriate. The heading should include the period of time for which the income statement is presented.**
- 2. Gain from earthquake loss should be shown separately as an unusual item assuming that it is material.**
- 3. The unrealized holding gain on fair value-OCI investments should be shown after net income as part of other comprehensive income, on a net of tax basis. The unrealized holding gain on fair value-OCI investments may be reclassified subsequently to net income or loss.**
- 4. Cost of goods sold is usually listed as the first expense, followed by selling, administrative, and other expenses.**
- 5. Advertising expense is a selling expense and should usually be classified as such.**
- 6. Loss on inventory due to decline in NRV might be classified as an unusual item and separately disclosed if it is unusual or infrequent, and material.**
- 7. Loss on discontinued operations requires a separate classification after income from continuing operations.**
- 8. Intraproduct income tax allocation is required to relate income tax expense to income from continuing operations and loss on discontinued operations.**
- 9. Under IFRS, earnings per share data is a required presentation for income from continuing operations, loss from discontinued operations and net income.**

PROBLEM 4-14 (Continued)

b)

Amos Corporation
Statement of Comprehensive Income
For the Year Ended December 31, 2014

Revenues	
Sales revenue	\$850,000
Dividend revenue	32,300
Gain on recovery of earthquake loss	<u>27,300</u>
Total revenues	<u>909,600</u>
Expenses	
Cost of goods sold	510,000
Selling expenses (\$100,100 + \$13,700)	113,800
Administrative expenses	73,400
Loss on inventory due to decline in NRV	<u>34,000</u>
Total expenses	<u>731,200</u>
Income from continuing operations before income tax	178,400
Income tax*	<u>44,600</u>
Income from continuing operations	133,800
Discontinued operations	
Loss from operations, (net of income tax recovery of \$12,150)**	<u>36,450</u>
Net income	97,350
Other comprehensive income	
Items that may be reclassified subsequently to net income or loss:	
Unrealized holding gain, (net of tax of \$1,250)	<u>3,750</u>
Comprehensive income	<u><u>\$101,100</u></u>
Earnings per share:	
Income from continuing operations	\$1.34 ^a
Discontinued operations	<u>(0.36) ^b</u>
Net income	<u><u>\$0.98</u> ^c</u>

* The income tax rate is inferred as 25% by comparing the income tax expense to the income before income tax = \$33,700 / \$134,800.

** \$12,150 = \$48,600 X 25%.

^a \$133,800 / 100,000 shares

^b (\$36,450) / 100,000 shares

^c \$97,350 / 100,000 shares

PROBLEM 4-15

Feeling Alright Vitamin Limited Statement of Changes in Equity For the Year Ended December 31, 2014

	<u>Total</u>	<u>Comp. Income</u>	<u>Preferred Shares</u>	<u>Common Shares</u>	<u>Contr. Surplus</u>	<u>Retained Earnings</u>	<u>Acc. Other Comp. Inc.</u>
Beginning Balance	\$1,932,600		\$250,000	\$600,000	\$300,000	\$257,600	\$525,000
Comprehensive Income:							
Net income	325,000	\$325,000				325,000	
Other comp. income							
Unrealized gains*	82,000	<u>82,000</u>					82,000
Comprehensive Income		<u>\$407,000</u>					
Dividends to shareholders:							
Preferred	(62,000)					(62,000)	
Common	(120,000)					(120,000)	
Issue of equity:							
Preferred shares	5,000		5,000				
Common shares	300,000			300,000			
Adjustment to correct prior error	<u>48,000</u>					<u>48,000</u>	
Ending Balance	<u>\$2,510,600</u>		<u>\$255,000</u>	<u>\$900,000</u>	<u>\$300,000</u>	<u>\$448,600</u>	<u>\$607,000</u>

*May be reclassified subsequently to net income or loss.

PROBLEM 4-16

- (a)** The main deficiency in the Baring statement is that important information is being aggregated, particularly in the “Costs and Expenses” line item. More detail likely could be found in Baring’s published financial statements. However, the condensed income statement may be the one that investors and creditors rely upon. Also, the statement is missing earnings per share information.
- (b)** Where material, Baring should provide additional details regarding the expenses included in Costs and Expenses on the face of the income statement. Alternatively, the company could provide the information in the notes to the financial statements, which should be referenced on the face of the income statement. The company may provide detailed information about the expenses classified by nature of expense (payroll, depreciation, changes in inventories etc.) or by function (cost of sales, distribution costs, administrative costs, and other). If the latter is chosen, additional information about the nature should be presented as well. The company could present the financial information in billions of dollars.
- (c)** Companies may provide minimal disclosure in order to not reveal competitive or sensitive financial information. Management may also not be aware of the type of detailed information users would find useful since financial information is prepared by management based on their assessment of users’ needs. Company management may also mistakenly view IFRS requirements as the required disclosure rather than the minimum disclosure required. Management may also use minimal disclosure to avoid questions on its management practices and assessment of its stewardship abilities, or to hide financial engineering transactions that could prove embarrassing.

***PROBLEM 4-17**

**(a) Razorback Sales and Service
Income Statement
For the Month Ended January 31, 2014**

	<u>Cash Basis</u>	<u>Accrual Basis</u>
Sales revenue	\$75,000	\$105,750*
Expenses		
Cost of computers & printers:		
Purchased and paid	89,250**	
Sold		63,750***
Salaries and wages	9,600	12,600
Rent	6,000	2,000
Other Expenses	8,400	10,400
Total expenses	<u>113,250</u>	<u>88,750</u>
Net income (loss)	<u>\$(38,250)</u>	<u>\$ 17,000</u>

* $(\$2,550 \times 30) + (\$4,500 \times 4) + (\$750 \times 15)$

** $(\$1,500 \times 40) + (\$3,000 \times 6) + (\$450 \times 25)$

*** $(\$1,500 \times 30) + (\$3,000 \times 4) + (\$450 \times 15)$

***PROBLEM 4-17 (Continued)**

**(b) Razorback Sales and Service
Balance Sheet
As of January 31, 2014**

	<u>Cash Basis</u>	<u>Accrual Basis</u>
Assets		
Cash	\$51,750 ^a	\$ 51,750 ^a
Accounts Receivable		30,750
Inventory		25,500 ^b
Prepaid rent		<u>4,000</u>
Total assets	<u>\$51,750</u>	<u>\$112,000</u>
Liabilities and Owners' Equity		
Accounts payable		\$ 2,000
Salaries and wages payable		3,000
Owners' equity	<u>\$51,750^c</u>	<u>107,000^d</u>
Total liabilities and owners' equity	<u>\$51,750</u>	<u>\$112,000</u>

^a Original investment	\$90,000
Cash sales revenue	75,000
Cash purchases	(89,250)
Rent paid	(6,000)
Salaries and wages paid	(9,600)
Other expenses	<u>(8,400)</u>
Cash balance Jan. 31	<u>\$51,750</u>

^b(10 X \$1,500) + (2 X \$3,000) + (10 X \$450).

^cInitial investment minus net loss: \$90,000 – \$38,250.

^dInitial investment plus net income: \$90,000 + \$17,000.

***PROBLEM 4-17 (Continued)**

- (c)**
- 1. The \$30,750 in receivables from customers is an asset and a future cash flow resulting from sales revenue that is ignored. The cash basis understates the amount of sales revenue and inflow of assets in January from the sale of computers and printers by \$30,750.**
 - 2. The cost of computers and printers sold in January is overstated by \$25,500. The unsold computers and printers are an asset of \$25,500 in the form of inventory.**
 - 3. The cash basis ignores \$3,000 of the salaries that have been earned by the employees in January and will be paid in February.**
 - 4. Rent expense on the cash basis is overstated by \$4,000. This prepayment is an asset in the form of two months' future right to the use of office, showroom, and repair space and should appear on the balance sheet.**
 - 5. Other operating expenses on the cash basis are understated by \$2,000 as is the liability for the unpaid portion of these expenses.**

***PROBLEM 4-18**

Dear Dr. Gleason:

Last week, you asked me to calculate net income on the accrual basis for Bones Clinic. For the year ending December 31, 2014, Bones Clinic earned \$99,610. The following explanation as well as the attached schedule should help you to understand how I derived this amount.

First, I determined how much of your cash collections resulted from work which you actually performed during 2014. Obviously, the fees receivable existing on January 1, 2014 could not have been earned during 2014. Likewise, your ending receivables represent revenue, which you earned during 2014 but were not paid for. Because cash collections include payments made on beginning receivables but not on year-end receivables, beginning fees receivable must be subtracted from your cash collections while year-end fees receivable must be added.

The same logic applies to your unearned fees. As of January 1, 2014, these fees of \$2,840 represent treatment that your patients had paid for but had not yet received. At year-end, a \$1,620 balance in this account indicates revenue, which you collected but have not yet earned. Because the beginning unearned fees were eventually earned during 2014, they must be added to 2014 cash collections while the ending fees must be deducted.

Next, I calculated your 2014 expenses. Accrued liabilities at the beginning of the year represent those incurred but not paid during 2013. Likewise, those at year-end were incurred during 2014 but not yet paid at year-end. Because cash disbursements include payments made on 2013 liabilities but not on 2014 liabilities existing at year-end, your 2014 disbursements must be adjusted for these items. To determine expenses resulting from operations during 2014, I subtracted the beginning accrued liabilities balance and added the ending accrued liabilities balance.

***PROBLEM 4-18 (Continued)**

Finally, prepaid expenses represent money paid in advance for services, which you have not yet received. Your beginning prepaid expenses represent 2014 expenses paid in advance while ending prepaid expenses indicate 2015 expenses. Thus, I added beginning prepaid expenses and subtracted the ending ones to derive 2014 expenses.

As a result, your gross revenue for 2014 is \$154,070, and your operating expenses are \$54,460, amounting to net income of \$99,610. The enclosed schedule provides supporting computations.

I hope that this information helps you. Thank you for giving me the opportunity to serve you.

Sincerely,

Your Name, C.A.

***PROBLEM 4-18 (Continued)**

**Bones Clinic
Conversion of Income Statement
From Cash Basis to Accrual Basis
For the Year 2014**

	<u>Cash Basis</u>	<u>Adjustments</u> <u>Add</u> <u>Ded.</u>	<u>Accrual Basis</u>
Receipts from fees:	\$146,000		
–Fees receivable, Jan. 1		\$9,250	
+Fees receivable, Dec. 31		\$16,100	
+Unearned fees, Jan. 1		2,840	
–Unearned fees, Dec. 31		1,620	
Revenue from fees			\$154,070
Disbursements:	55,470		
–Accrued liabilities, Jan. 1		3,435	
+Accrued liabilities, Dec. 31		2,200	
+Prepaid expenses, Jan. 1		2,000	
–Prepaid expenses, Dec. 31		1,775	
Operating expenses	<u> </u>		54,460
Receipts over disbursements—cash basis	<u>\$90,530</u>		
Net income—accrual basis			<u>\$ 99,610</u>

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text. Note that the first few chapters of the text lay the foundation for financial reporting decision-making. Therefore the cases in the first few chapters (1-5) are shorter with less depth. As such, they may not cover all aspects of a full-blown case analysis.

CA 4-1 OSC

Overview

As a member of the OSC, your role is to ensure that company financial statements provide good information to suppliers of capital so that they can make decisions about where to invest. IFRS is a constraint since all of these companies would be public companies if they were required to file financial statements with the OSC. It is not possible to identify reporting biases for all these companies.

Analysis and Recommendations

<u>Description</u>	<u>Discussion</u>
1. Inventory overstated two years ago.	Error has "washed out"; that is, subsequent income statement compensated for the error. However, prior year income statements should be restated if presented for comparative purposes and a discussion of the error reported in the notes, since the prior year's information has been restated.
2. Unusual item.	May be treated as unusual due to its size.
3. Amortization period extended.	Changes in estimates are handled using the prospective treatment. The current and future years' income will be increased from the reduced charge for amortization. Note disclosure is important since the amortization is materially lower. Care should be taken to watch for a possible bias to <u>overstate net income.</u>

CA 4-1 (Continued)

4. Change in bad debt percentage (lower).	Change in estimate, considered part of normal business activity and given a prospective treatment. Care should be taken to watch for a possible bias to overstate net income.
5. Potential discontinued operations.	Gain or loss on discontinued operations reported on the income statement, net of taxes and with separate earnings per share disclosure, if the criteria for discontinued operation accounting are met. As a separate subsidiary and geographical area, it is viewed as a separate component with separately distinguishable operations and financial information. Therefore it qualifies for separate presentation.
6. Change in accounting policy.	A change in amortization methods is a change in accounting estimate. The change is applied prospectively.
7. Expense related to failed proposal.	Consideration may be given to treating as unusual.
8. Strike.	Strikes are typical business risks for companies that are unionized. They may be seen as atypical if there is no union and no history of strikes. The losses may be reported in body of the income statement, possibly as an unusual item (in continuing operations).
9. Correction of error.	Corrections of errors relating to prior years must be adjustments to prior years' income in the retained earnings statements. Adjust beginning retained earnings, net of any tax effect.

CA 4-1 (Continued)

10. Costs associated with loss due to government decree.	Material and unusual in nature (atypical), therefore treat as an unusual item.
11. Disposition of business.	As long as the business is a separate component (could argue this since major classes of customers) and is operationally distinct (financial records separate), may treat as discontinued per IFRS 5. In addition to being a separate component, the assets must meet the definition of being held for sale. Assuming all criteria are met for treating as discontinued operation, the gain or loss on discontinued operations would be reported on the income statement, net of taxes and with separate earnings per share disclosure.

IC4-1 UNITED MANUFACTURING

Overview

- The company is in bankruptcy proceedings and needs cash to effect a change in strategy. The bank is therefore the key user and will look to assess the ability of the company to repay loans. The higher the perceived risk, the higher the interest rate that will be charged.
- Management will therefore want to present the company in the best light as there is a concern that the loan will be turned down. Note that management will want to ensure transparency as well.
- IFRS is a constraint since the shares trade on the TSX.
- The overall reporting objective, given the role, will be more aggressive while still being within IFRS and transparent.

Analysis and Recommendations

Sale of bindings to LKT

Recognize revenue as sale	No sale/financing
- Profits of \$4 million material (material since 5% of \$20 million loss = \$1 million). - Legal title and possession have passed to LKT. - Transaction is measurable and cash is already collected - \$10 million. - Persuasive evidence of contract = agreement. - Other	- Economic substance is that this is a loan – the company is short of cash and this is an alternate means of unlocking the cash that is tied up in the inventory. - No profit should be recognized. - Since the company has agreed to buy back the inventory in January, they have an obligation which cannot be avoided. Thus this represents a liability. - The inventory appears to have little or no value since management is unsure as to how much they can resell it for and so the cost of \$6 million should be written off. - This is a material loss and will make the company look even worse. - Other

Even though it is tempting to record the transaction as a sale and therefore make the company look better, the economic substance is that this is a financing transaction.

IC4-1 (CONTINUED)

Sale of Snow Tubes

Recognize as a sale	No sale/financing transaction
- Since the goods are shipped FOB shipping point in December, a sale has occurred. - Legal title and possession has therefore passed. - Persuasive evidence of contract – agreement exists. - The \$1 million profit is material (since it equals the \$1 million threshold noted earlier). - There is a bona fide reason for selling the inventory – i.e. need the space as well as the cash generated. - It is not clear in the case what the buyback price is. If it is (future) market price, then this is a separate deal. - Other	- Even though the goods were shipped FOB shipping point, the company still retains the risk of loss since they reimburse the customer if there is damage. - Since UMC will take back any unsold merchandise – they still have the risk of loss on the goods. - If this is estimable – may make a case to recognize the sale as well as an allowance for returns. - The fact that the company will end up paying storage and insurance costs is further evidence that they have retained the risks of loss. This also supports the fact that the transaction is like a parking transaction only. - Although it is not clear in the case, if the buyback price reflects the original transaction price, then this supports the fact that the transaction is a financing transaction. - Other

In conclusion, this appears to be a bona fide sale transaction and should be recorded as such. The only issue is how, if at all, to record the potential obligation for buyback. If it is measurable, it could accrue any potential liability for items not sold by MMN. Detailed disclosures should be provided.

IC4-1 (CONTINUED)

Disposition of ski business

Present as discontinued operations	Loss/costs part of continuing operations
- Ski business separate and distinct from snow tubing. - Cash flows and records separate – (\$20 million loss) - Will no longer be involved in selling skis. - Want to show this as separate from new business since bank interested in ability to generate profits and cash flows in future. - Other.	- Retaining facilities and people (will be retrained) and therefore will have continuing involvement in the assets and related cash flows. - This is not a separate division or subsidiary but really represents the whole income statement – it is therefore not really a component therefore. - Other.

In conclusion, this is not really a disposition of a division but rather the transitioning of the whole business. Therefore, it should not be shown as discontinued operations.

Minor issue —costs to refurbish the machinery. This may be capitalized since will have future benefit.

IC4-2 BMI

Overview:

BMI is experiencing pressure from the overall economic conditions and has already incurred losses from one of its segments. Despite being a private company, BMI has strong intentions of going public in order to raise the necessary equity financing and should therefore consider using IFRS.

BMI's management is an important user of the financial statements. As a result of the economic environment and future IPO offering, Management may have an increased bias to smooth earnings, separately disclose losses outside of continuing operations and defer the recognition of liabilities in order to artificially inflate BMI's share price.

Future investors will also be analyzing the statements very carefully to determine if BMI's share price is overpriced.

The auditor will want the financial statements to be transparent and neutral.

Issue: Whether to classify the automotive division as held for sale

IC 4-2 (Continued)

Classify as Held for Sale	No separate classification
-as the sale of the automotive and automotive part division has not yet been completed, the assets must meet the held for sale criteria to be designated as discontinued operations. -any future expected losses (the additional \$1M) are not allowed to be classified as discontinued operations. - the automotive and automotive parts can be identified as a separate component of BMI because the cash-flows can be easily distinguished (ie: management is able to separately track the profitability of the automobiles and automotive parts. -the sale is highly probable as a formal plan has been approved by the Board of Directors before the end of the year. - the negotiation with the supplier is evidence that management is actively seeking a buyer for the assets. - management has already committed to a plan to disassemble the previous modifications before the end of the year by hiring a contractor. -measurement of the plant (including the equipment) should remain at CV as there is no indication that FV is lower than CV at year end. -other.	-the assets are not available for immediate sale as BMI must spend \$500,000 to remove previous modifications made to the equipment for available use by a third party. - the sale has a contingency provision whereby BMI must remove the existing modifications to the purchaser's satisfaction. -it is unclear whether management believes that 90% of its asking price is representative of fair value. BMI may be unwilling to accept the supplier's bid as fair value for the equipment. -there is no evidence in the case that the sale will be completed within one year from the balance sheet date (initial date of held for sale classification). -other.

Conclusion: The criteria for held for sale are not met as of the end of the year and therefore the automotive division assets cannot be classified separately as held for sale on the balance sheet and the losses from the division (\$1M) cannot be separated as discontinued operations on the income statement. Provided the modifications are completed and BMI can come to an agreement with the purchaser on a fair price before the Board authorizes the financial statements, the transaction will be disclosed in the notes.

Issue: Whether to record a liability for the purchase commitments and/or the contract penalty

IC 4-2 (Continued)

Record liability	Do not record any liability
the 'event' of not taking delivery of the spare parts represents a past transaction. -a contract exists and payment is therefore enforceable. -the \$250,000 represents the minimal cash obligation to BMI each year (for both the current and following year). -there are unavoidable costs which BMI will be responsible for despite not taking delivery of the parts from the truck supplier - this represents an onerous obligation. -the case does identify whether the supplier has a legal obligation to make any changes to its goods in order to appease BMI into taking future delivery. -other.	-the purchase commitment represents an executory contract which does not have to be recorded as a liability. -BMI's lawyer's believe that BMI will not have to pay the penalty because of a change in engineering of the part specification required. -the supplier is willing to make modifications to its spare part in order to comply with BMI's new safety standard - to enable BMI to accept delivery in the future. -other.

Conclusion: As it is not certain whether the supplier has operational capability, legal obligation or is willing to adjust the spare part to conform to BMI's new safety standard the minimum penalty (unavoidable cost) should be accrued i.e., \$250,000 in both the current year and an accrual for the final year of the contract.

Minor Issue: How to classify the new building: as an investment property or as PP&E.

BMI has independent evidence that the building can be clearly segregated into two distinct components - 50% for operational use and 50% which can be separately leased out or sold. Both sections of the building must initially be recorded at cost.

For the 50% that will be leased out and used as an investment property, BMI has the choice of subsequently accounting for the property at fair value or to continue to account at cost. Irrespective of the accounting policy choice, BMI must disclose the fair value of the property in the notes of the statements. The 50% that will be used in the operations of the business must be classified as PP&E. BMI has the option of using the revaluation model or continue to account for that 50% of the building at cost.

IC 4-2 (Continued)

FV changes for only the 50% which is classified as investment property must flow through net income. Changes in FV for the 50% classified as PP&E must flow through a revaluation surplus in other comprehensive income. This will not impact net income unless a change in use occurs or BMI sells the building.

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 4-1

Purpose - is to assist students in understanding the differences between income statements prepared using “current operating performance” method or the “all-inclusive” method.

WA 4-2

Purpose - is to assist students in understanding the ethical issues of honesty and integrity in financial reporting and deals with cash versus accrual accounting.

WA 4-3

Purpose - is to assist students in understanding when an asset should be reported as Held for Sale under private entity GAAP and IFRS.

WA 4-4

Purpose - is to assist students in understanding why the concept of comprehensive income is not used under private entity GAAP, and highlights differences between private entity GAAP and IFRS.

WA 4-5

Purpose - is to assist students in understanding why extraordinary items are no longer allowed to be reported separately.

WA 4-6

Purpose – is to assist students in understanding the difference between IFRS and accounting standards for private enterprises as noted in this chapter.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 4-1

- (a) The "current operating performance" income statement is intended to provide a net income figure that is the best possible indication of the earning power of the business. Under this concept, which emphasizes the importance of recurring net income and the indication of earning power, all material irregular items and nonrecurring items should be reported outside of net income, often as adjustments to retained earnings. Only items of revenue and expense applicable to the regular operations of the current period should be used in ascertaining net income for the period.

The "all-inclusive" income statement may be said to have been prepared on the "clean surplus" theory. All irregular and nonrecurring items, regardless of their materiality, are included in the determination of periodic net income. Thus, a series of income statements will reveal all earnings information for the periods covered by the statements.

- (b) An income statement prepared strictly on the current operating performance basis would show operating expenses deducted from net revenues to arrive at income from the operations, which characterize the business. Recurring financial items are then added or deducted to produce net income. Material nonrecurring items are not included in the income statement but are reported elsewhere, such as being charged or credited directly to retained earnings.

An income statement prepared strictly on the all-inclusive basis would show the same calculation of income from operations as does the current operating performance statement. Then the non-operating and nonrecurring items and corrections of prior periods' income (in a strict all-inclusive basis) would be added or deducted to produce net income.

There is substantial agreement that over the years all profits and losses should be accounted for in income, and a starting presumption is that all items of profit and loss recognized during an accounting period should be reported in the income of that period. However, it is recognized that readers of income statements draw inferences from a company's reported net income figure. For this reason, non-recurring charges and credits should be segregated on the income statement in an appropriately labelled separate section.

- (c) Arguments advanced for the "all-inclusive" income statement are:

WA 4-1 (Continued)

1. Irregular items are related to income determination, and net income for the period would be misstated if they were excluded. These items are still contributing to the net earnings of the company.
2. Non-recurring items such as write offs, have feedback value in assessing some estimates that have been used in previous years.
3. Non-recurring items can also have predictive value in determining the riskiness of the earnings of the company.
4. All items should be included so that the income statements over a period of years will aggregate to the company's total income.
5. Readers of the financial statements might be unaware that the changes in the retained earnings should be noted as well as the income statement to determine the results of the year's activities. Items handled through retained earnings might be overlooked.
6. Often there is no clear division between irregular items and operating items—frequently the distinction is a matter of opinion.
7. Charges and credits to retained earnings imply that the items are nonrecurring, but such items do recur.
8. There is a tendency for retained earnings charges to exceed credits so that, over a period of years, the income statements would exaggerate the company's earning power.
9. Retained earnings charges and credits create an opportunity for manipulation or normalization in the determination of net income.
10. Inconsistencies in determining irregular items affect the comparability of the company's earnings with prior years and with earnings of other companies.
11. The reader's attention is directed to the estimated and tentative nature of the income statement when corrections of prior years' net income are included.

Arguments offered for the "current operating performance" income statement are:

1. The earning power of the company is of interest to investors and others. Only normal operations produce the net income in which they are interested.
2. The predictive value of the earnings is reduced when it includes non-recurring items.
3. When nonrecurring items are included in the income statement, some readers are unable to determine the results of normal operations.
4. Inclusion of nonrecurring items causes difficulty in determining the trend of the company's operations and in comparing the results of operations with others.

WA 4-1 (Continued)

5. There is a distortion of income for two years when a material correction of a prior year's net income is reported in the income statement

Proponents of the combined "income and retained earnings statement" argue that:

1. The statement carries out the theory that the income statement is the connecting link between retained earnings at the beginning and the end of the period.
 2. Including beginning and ending totals of retained earnings is desirable as a means of linking together the income statement and the balance sheet.
 3. All factors affecting retained earnings during the period are combined in one statement so that none will be overlooked.
 4. The statement distinguishes current charges and credits related to usual business operations from irregular charges and credits by placing them in different sections of a continuous statement.
 5. The reader can readily determine the disposition of the current period's net income as to whether it has been distributed as dividends or retained in the company.
- (d) Other Comprehensive Income (only required under IFRS) includes such items as: unrealized gains and losses on certain equity securities, certain translation gains and losses on foreign currency, unrealized gains and losses on certain hedging transactions and unrealized surpluses from the evaluation of property, plant and equipment. In a Statement of Comprehensive Income, the other comprehensive income is reported following the calculation of the net earnings. (The details of the revenue and expenses making up the net earnings can either be included in this single statement or a separate statement of earnings.) With respect to unrealized holding gains and losses on securities, this method of disclosure (i.e. segregation from net income) highlights the effect that fluctuations in fair value have on net income and it provides additional information to the user about the gain or loss that would result on a sale of an investment. The question is: why segregate this from net income? It is thought that it transitions GAAP over to a more "all-inclusive" concept of net income.

***WA 4-2**

This question deals with the ethical issues of honesty and integrity in financial reporting, and the owners' right to know the full financial picture.

The ethical accountant should prepare financial statements on the accrual basis, as this is what is required under GAAP, and explain the differences to the owners. If the owners withdraw cash from the business without considering the need to replace inventory and capital assets, they may harm the business' long term prospects. Showing the financial statements on a cash basis could also cause the owners to make bad decisions as they would not be recognizing costs that may have already been incurred and will assume more cash is available for other projects. Users outside the business such as banks and other creditors would require financial statements prepared on the accrual basis. The ethical accountant should explain the concepts behind accrual-based accounting to the three owners. Ensuring they have a firm understanding of financial statement preparation will improve their ability to make decisions relating to the business. Job security for the ethical accountant should not be impacted if he/she clearly explains that the different reporting does not change the performance of the company, rather just when performance is reported.

WA 4-3

- (a) The financial reporting issue in this question is whether the Building should continue to be recorded as Property, Plant and Equipment (and depreciated) or whether it should be reclassified and presented as Held for Sale. There is a formal plan to sell the head office tower (which has been approved by the Board of Directors) and this supports classification as Held for Sale. However, there are other criteria that must be met: the building must be available for immediate sale in its present state, there must be an active plan to find a buyer, the sale must be probable, the selling price reasonable and it must be likely that the plans to sell will stand. In this case, because the company plans to continue to use the building until its new head office is built, and because construction has not yet started, all of the criteria are not met. Specifically, the building is not available for immediate sale.

Therefore, the Building would not be segregated on the balance sheet as an "Asset held for sale". If the building meets the impairment test, then the building would be remeasured to its fair value of \$49 million (minus costs to sell). The company would continue to depreciate the asset and should consider whether impairment exists.

- (b) Assuming that the criteria noted in (a) are now met, the company will record the building as Held for Sale. This means that the asset will be written down to its fair value of \$42 million and a loss of \$3 million will be reported in the income statement. It does not appear that this building qualifies as a discontinued operation, since operations are still continuing in the new building. Depreciation on the old building will be stopped at the time it is classified as Held for Sale.

Under ASPE, the old building will continue to be presented as a long term asset, but will be shown separately on the balance sheet as Assets Held for Sale.

Under IFRS, the old building will be shown under current assets, in a category called Assets Held for Sale.

WA 4-4

- (a) The reasons that the concept has been eliminated from ASPE are:
- The costs to prepare the additional information and format the presentation outweigh the benefits for the users.
 - Generally, the types of items included in other comprehensive income are either not allowed under ASPE or not usually found in private entities. Examples of some of these are described further below:
 - i. Surpluses related to the revaluation of property, plant and equipment – This method of reporting for PP&E is not allowed under ASPE.
 - ii. Unrealized gains and losses on equity investments designated as gains/losses through other comprehensive income – Under ASPE, gains and losses on any financial instruments that are required to be fair valued are recorded directly to net earnings. The reason for this is to simplify the accounting and reporting for private entities. Also, these types of entities would not normally have a lot of transactions of this nature.
 - iii. Gains and losses on foreign currency translations – Usually, few private entities would have this sort of foreign investments – and when they do, the cumulative translation gains and losses will be reported directly in equity.
- (b) The discussion of the Earnings per Share calculations and what numbers should be used as the numerator, depends on how a user interprets EPS. What should be reflected in the “earnings” of a company? Should the earnings be “all-inclusive” to include all unrealized gains and losses, or should only some unrealized and all realized gains and losses be included in the EPS? If fair value is important for balance sheet presentation, shouldn't the anticipated gains and losses on all fair value adjustments be reflected in the EPS? On the other hand, some might argue that because these gains and losses are unrealized, there is a strong possibility that these might reverse by the time the entity disposes of the related assets. This would then cause artificial volatility in the EPS. A possible solution may be to report the EPS on both the net earnings and on comprehensive income, and then a user would have both pieces of information available.

WA 4-5

In order to qualify as an extraordinary item, the company had to show that the material event was not recurring, was not typical of the business, and not dependent on management decisions. These criteria are very difficult to assess. Arguments to support eliminating extraordinary items relate to the fact that these events still arise from normal business risks faced by the entity. If this is the case, why should they be given special treatment? The nature or function of the transaction should guide its presentation, not its frequency of occurrence. These items can still be given separate line disclosure, but should be part of normal operating income. The second factor is that it is often an arbitrary segregation of the external events. For example, this was the case when the terrorists attacked on September 11, 2001. This event resulted in a significant disruption for many businesses. However, at the same time there was also a recession. The difficulty is trying to allocate a portion of the losses to the terrorist attacks and a portion of the losses to the recession. There might be a bias in some companies to report as much of the loss as possible as extraordinary, given that analysts might ignore extraordinary items in assessing the company's future potential. Given that separate disclosure is still allowed, and related notes can also be provided, the separate treatment of extraordinary items was eliminated.

WA 4-6

Generally, ASPE has been designed, to reduce complexity in the recognition and measurement of items, to reduce disclosure requirements, and to make the information useful for the main users, who have been defined as creditors. ASPE requires an income statement and the statement of retained earnings. Under IFRS, the statement of comprehensive income is required along with a statement of changes in shareholder's equity. A statement of comprehensive income (which includes the other comprehensive income items) is not required under ASPE for the following reasons:

- Gains and losses that arise under IFRS due to accounting policy choices do not exist under ASPE. Examples of these would relate to gains and losses arising on revaluation of property, plant and equipment, or on the reporting of cash flow hedges.
- Gains and losses are booked directly to the profit or loss under ASPE such as certain foreign exchange gains and losses, and unrealized gains and losses on some financial instruments.

ASPE only requires a statement of retained earnings with note disclosure for changes in the other equity accounts. A statement of changes in shareholders' equity is not required. Private enterprises are less complex than publicly accountable enterprises, and generally have very few categories in the equity section of the balance sheet. As seen above, there are no other comprehensive income items.

With respect to the income statement, these are the differences between ASPE and IFRS:

- There is no guidance under ASPE as to whether expenses should be presented by function or by nature. As a result, private enterprises are free to present expenses in whatever manner they wish, provided they are transparent and disclose the specific line items required by the section 1520. IFRS outlines that companies will present expenses either by function or by nature and the choice will depend on what is reliable and most relevant.
- ASPE mandates a longer list of specific requirements on the face of the income statement than IFRS. The additional items that must be displayed on the income statement under ASPE (and not mandated under IFRS) are:
 - o amount of inventories recognized as expense for the period (under IFRS this can be in the notes if not on the face)
 - o income from all investments (not just equity investments as required under IFRS)

WA 4-6 (Continued)

- o government assistance, amortization, impairment and compensation costs (under IFRS these items could be disclosed in notes or on face of statement)
- o exchange gains and losses (under IFRS these would be disclosed in the statement of comprehensive income or in the notes based on the accounting policy requirements)
- o unusual items (under IFRS unusual items are not specifically discussed in the accounting policies; however any material amounts should be disclosed on the face of the income statement)
- o non-controlling interest (under IFRS, this is an allocation of profit after net earnings). The reason for this difference would be due to IFRS requiring a statement of changes in shareholders' equity that would show the non-controlling interest allocation in this statement
- o no "other comprehensive income items" since ASPE does not recognize this concept
- o Earnings per share is not mentioned under ASPE since, by definition, most private enterprises are closely held and not traded; EPS would not be useful information for the few shareholders who do own the shares
- o ASPE does not mention extraordinary items which are specifically excluded under IFRS; the reason for this may be that extraordinary items would occur rarely (if at all) for private companies, or that it is too difficult to differentiate between items that are extraordinary and those that are unusual.

Therefore, the primary reasons for these differences in disclosure on the face of the income statements are the following:

- differences in specific accounting policies under ASPE and IFRS relating to disclosure requirements for certain items on the statement of comprehensive income that ASPE does not have;
- IFRS requires significantly more disclosure in the notes, and ASPE is trying to reduce the disclosure required. By mandating disclosure on the face of the income statement, the number of notes is reduced.

WA 4-6 (Continued)

The chapter outlines two other major differences between ASPE and IFRS:

1. Discontinued operations and presentation of assets held for sale. Below are the major differences with respect to this policy:

- ASPE is less restrictive in what will qualify to be treated as a discontinued operation allowing an operating segment, reporting unit, a subsidiary or an asset group to qualify. Likely this difference is to reduce complexity for the preparer of ASPE statements.
- Held for sale assets and liabilities under ASPE are classified as current or non-current, depending on the nature of the related assets and liabilities. Under IFRS, these are always presented as current.

2. Accounting changes. Under ASPE, certain accounting policy changes do not have to meet the “reliable and more relevant” test. Examples of these policies relate to accounting for income taxes, and investments in other entities. These areas are very complex, and often the reason for choosing a policy is to reduce the time and complexity of the calculations and presentations, even though the result might not be more relevant.

RESEARCH AND FINANCIAL ANALYSIS

RA 4-1

(a) Shoppers Drug Mart uses a condensed multiple-step statement of earnings.

(b) Shoppers Drug Mart is in the business of both owning and licensing others to own and operate retail drug stores, medical clinic pharmacies and beauty stores and providing specialty drug distribution and patient support services. The company plays a very active role in the management, financing, and operations of the stores owned by its licensees and receives a significant percentage of the profits of these licensed stores. This involvement and non-shareholder "control" based on being exposed to the benefits and risks of loss is reflected in the income statement and balance sheet of Shoppers Drug Mart. They are reported as if the licensed stores were actually owned by and were subsidiaries of Shoppers instead of licensees. That is, all the revenues and expenses are brought into the Shopper's income statement and all the assets and liabilities of the licensees are reported on Shopper's balance sheet.

(c) The company presents its expenses on a functional basis: cost of goods sold, operating and administrative expenses, finance expenses and income tax expense. Throughout the notes to the statements, however, there is information to allow the reader to determine the nature of some of the significant expenses: depreciation and amortization, payroll related costs, lease costs, costs of inventory consumed (basically a retail operation), etc.

RA 4-1 (Continued)

- (d) The company included the effective portion of changes in fair value of hedges on interest rate derivatives, the effective portion of changes in the fair value of hedges on equity forward derivatives, the net change in fair value of hedges on interest rate and equity forward derivatives transferred to earnings, and actuarial losses on retirement benefit obligations. Total comprehensive income for the year was \$592,363 (\$584,333 in 2010). No amounts have been deducted as attributable to a non-controlling interest. Instead, these consolidated financial statements, prepared under IAS 27, represent the results and position of all of Shoppers Drug Mart and its subsidiaries and its licensees, through which the majority of Shoppers' business activity is carried out. In addition, all of Shoppers' subsidiary companies are 100% owned, so there is no non-controlling interest in those companies. The expectation is that Shoppers also otherwise presents financial statements prepared on the basis of legal ownership in addition to these that represent the total activity and resources which it oversees, manages, and benefits from.
- (e) The EPS is calculated on net earnings for the financial year and the weighted average number of shares outstanding. The basic EPS and the diluted EPS are presented on the face of the income statement, both for the current year and the previous comparative year.

RA 4-2

ROYAL BANK OF CANADA

- (a) The core business activities of the bank are to lend money to businesses, individuals and governments. Interest income is the main source of revenue for the Royal Bank. The direct expenses related to the earning of interest revenue are interest expense and provision for credit losses. Other expenses incurred to generate this revenue include labour, occupancy, equipment, communication, and professional fees.
- (b) The presentation of the statement of income of Royal Bank highlights the sub-total between revenues from its core activities, less interest expense. The caption is "Net interest income". This caption is highlighted in the income statement to make comparisons easier between years and between banks. Other income items, which are of reduced significance in size, are itemized together, as are non-interest expenses.
- (c) The primary sources of income for the last three fiscal years for the Royal Bank appear below (in millions of Canadian dollars).

RA 4-2 (Continued)

ROYAL BANK OF CANADA

	2011	% of total	2010	%	2009	%
Primary sources Interest income:						
Loans	12,975	36.3	12,494	37.3	12,440	35.5
Securities	5,118	14.3	4,719	14.1	5,739	16.4
Reverse repurchase agreements	736	2.1	474	1.4	931	2.7
Deposits with banks	91	0.3	59	0.2	162	0.5
Primary sources Non-interest revenue :						
Insurance premiums	4,479	12.5	4,485	13.4	4,067	11.6
Trading revenue	800	2.2	1,333	4.0	2,380	6.8
Investment management and custodial fees	1,998	5.6	1,774	5.3	1,615	4.6
Mutual fund revenue	1,977	5.5	1,571	4.7	1,400	4.0
Securities brokerage commissions	1,329	3.7	1,271	3.8	1,357	3.9
Service charges	1,324	3.7	1,321	3.9	1,299	3.7
Underwriting and other advisory fees	1,489	4.2	1,193	3.6	1,049	3.0
Foreign exchange other than trading	683	1.9	608	1.8	635	1.8
Card service revenue	646	1.8	521	1.6	728	2.1
Credit fees	707	2.0	621	1.9	522	1.5
Securitization revenue	797	2.2	764	2.3	1,169	3.3
Net gain (loss) on available for sale securities	128	0.4	38	0.1	(611)	-1.7
Net gain on investment	473	1.3	244	0.7	126	0.4
Other						
Total	35,750	100%	33,490	100%	35,008	100%
	2011	% of total	2010	%	2009	%

RA 4-2 (Continued)

ROYAL BANK OF CANADA

The primary source of revenue by far continues to be interest income and specifically, interest from loans, despite the percentage of total coming from this source decreasing in 2011. The primary sources of non-interest revenues are insurance premiums, management fees, securities commissions and mutual fund revenues. The percentages of total income/revenues coming from these non-interest sources are relatively consistent except for trading revenues which will be dependent on equity price trends.

(d) The following transactions were included in the Statement of Changes in Shareholders' Equity:

- issuances and redemptions of preferred shares;
- issuances and redemptions of common shares;
- renounced stock appreciation rights;
- new issues of stock-based compensation awards;
- sales and purchases of treasury preferred shares and treasury common shares;
- net earnings for the year;
- dividends paid on preferred and common shares;
- premiums paid on redemption of common shares
- changes in gains and losses on derivatives designated as cash flow hedges;
- changes in unrealized gains and losses on available-for-sale securities; and
- changes in unrealized gains and losses on foreign currency translation amounts.

RA 4-3

BROOKFIELD ASSET MANAGEMENT INC. AND MAINSTREET EQUITY CORP

- (a) Brookfield Asset Management. uses the condensed multi-step income statement format while Mainstreet Equity Corp. uses the single step format. Both statements report their expenses by function.
- (b) Both companies are in the real estate property business. Mainstreet's strategy includes investing in multiple unit residential buildings. The company buys under-performing properties, and through renovation and implementation of operating efficiencies, will enhance the assets' values. Therefore, the company earns revenue from rent or sale of buildings. Brookfield is primarily in the business of owning, renting and managing commercial office and retail properties, generating electricity from power generating stations, transmission of electricity, and selling logs and related wood products from its timberlands (as per Note 3 on revenue recognition). The company's objective is to generate long term cash flows from a variety of properties including commercial properties, power generating stations, transmission assets, and other infrastructure properties.
- (c) The main source of revenues for Mainstreet is rental revenues which increased by 21% from 2010 to 2011. Brookfield generates revenue from asset management fees, rental income, sales of properties, sale of electricity, and sale of logs and other timber related products. On its income statement, Brookfield does not break down its different sources of revenue.
- (d) Yes, the nature of the business is reflected in the balance sheets of both companies. The primary asset for Mainstreet is real estate properties which represents 97% of all assets. Brookfield has 56% of its assets in property, plant and equipment.
- (e) Mainstreet has no other comprehensive income items. Brookfield has included the following types of other comprehensive income, including the related taxes:
- foreign currency translation;

RA 4-3 (Continued)

- unrealized gains and losses on available-for-sale investments; and
- revaluation of Property, Plant and Equipment
- financial contracts and power sale agreements
- equity accounted investments.

RA 4-4

CANADIAN SECURITIES ADMINISTRATION

- (a) The documents that can be found on the CSA website listed for the Bank of Montreal and the Royal Bank of Canada include:
1. Notices of annual filing
 2. Auditors' comfort letters
 3. Consent letters of issuer's legal counsel
 4. Prospectuses and related documents
 5. Decision Documents
 6. Press releases
 7. Interim financial statements
 8. Annual reports
 9. Annual information form
 10. Confirmations of mailing
 11. Proxy forms
 12. Meeting notices

- (b) The annual information form provides reference to and some of the information required by National Policy Statement No. 47 of the Canadian Securities Administrators and Schedule IX of the Quebec Securities Act Regulation for filing various regulatory authorities in Canada.

The Annual Information Form (AIF) provides information on the history of the business, description of the current business; names of directors and executives, including the number of shares owned by each; the composition and mandate of the audit committee and fees paid to the auditors; a history of the share price and dividends paid; the capital structure, and credit rating of the company.

Since the majority of the information provided is financial in nature, it would most certainly be of interest to a financial statement analyst. Although the information can be located through other means, the AIF is less likely to have missing information. It can be relied upon for completeness and accuracy, since it is also being closely monitored and used by the regulatory authorities.

- (c) The auditor of the Bank of Montreal is KPMG LLP. The auditor of Royal Bank of Canada is Deloitte & Touche LLP.
- (d) The stock of Bank of Montreal is traded on the Toronto Stock Exchange and the New York Stock Exchange. The stock of the Royal Bank of Canada is traded on the Toronto Stock Exchange and the New York Stock Exchange and other.

RA 4-4 (Continued)

- (e) The banks' web sites with links for investor relations provide the most current announcements and notices of the banks, and provide information such as the Annual Reports, but in segments. For example the web user can select to read only the notes to the financial statements. While the information is and should be the same as what is filed with the securities authorities, it is being presented in a more user-friendly format, considering the many possible users that gain access to this information through the web site. The web presentation can also take advantage of some multi-media presentation techniques that are not necessarily appropriate for the formal annual filings. Information of a more promotional nature is being emphasized for marketing and other purposes. Additional links to live updates of stock transactions, for example, are also available through this site.

RA 4-5

- (a) First of all, it is proposed that the statement of comprehensive income will be a single statement with a subtotal for profit or loss or net earnings for the period, and a final total for comprehensive income. The Board decided that a single statement format was the best to improve comparability and make it easier for users to find, use and understand. For example, information on both realized and unrealized gains will be presented in this single statement.

The Board recognized that there should be consistent classification of items across all the statements. Accordingly, there are a number of income statement categories that are being proposed which would provide consistency across the balance sheet, income statement and cash flow statement. In addition, information should be segregated to separately report operating activities from investing and financing activities. This separation is necessary for users to understand the business, and be able to predict future cash flows from each type of activity. The categories for the statement of comprehensive income proposed are as follows:

- Operating income and expenses
- Investing income and expenses;
- Financing asset income;
- Financing liability expenses;
- Income taxes on continuing operations;
- Discontinued operations, net of tax; and
- Other comprehensive income, net of tax – with an indication for each item as to whether it relates to an operating, investing or financing activity.

These categories will certainly improve financial reporting. Many analysts currently try to separate the company's current net earnings into these categories. Why? This separation gives useful information as to the true nature of the entity's normal operations, and what areas are generating the profit or losses for the company (ie. it may be that the entity's investments have been very successful in the current year, covering up losses made from the normal operations of the company). Financing activities are particularly important to separate since how a company finances its operations can vary significantly across competitors.

RA 4-5 (Continued)

(b) Another proposal is that income and expense items should be disaggregated by function within the operating, investing, financing assets and financing liabilities categories. Each income and expense will then be further disaggregated by nature. This should increase the usefulness of the information reported and assist with predicting future cash flows.

Three examples of this disaggregation follow (taken from Toolco Statement of Comprehensive Income - Appendix A of the Discussion Paper)

1. Operating revenue is separated into sales – wholesale and retail.
2. Cost of goods sold is further segregated into: materials, labour, overhead-depreciation, overhead-transport, overhead-other, change in inventory, pension, loss on obsolete inventory, and damaged inventory.
3. General and administrative expenses are segregated into: wages, salaries and benefits, depreciation, pension, share-based remuneration, interest on lease liability, research and development.

This type of disaggregation is extremely useful for analysts. When amounts are aggregated together and presented as a single line, for example the cost of goods sold, it is very difficult to prepare accurate forecasts for the future when the single line item is a combination of overhead costs, variable costs for material and labour, and changes in inventory amounts which are influenced by inventory costing methods. Having this level of disaggregation will be very beneficial.

RA 4-6

QUALITY OF EARNINGS RESEARCH

Student responses will vary depending on their sources. Some key points are as follows:

- § the more earnings reflect underlying economic reality, the higher the quality
- § earnings which are sustainable are higher quality than unsustainable earnings
- § earnings which can be converted to positive cash flow more quickly are higher quality than those which have a longer time lag or more uncertainty with respect to the ultimate conversion to cash flow
- § the less risky the business environment and the better the risks are managed, the higher the quality of earnings
- § more objectively determined earnings are higher quality than earnings which involve a high degree of estimation, accounting alternative choices and management bias
- § the more straightforward the presentation, the higher the quality of earnings

RA 4-7

BCE INC.

Management reporting of additional earnings numbers, outside of the traditional audited financial statements, provides additional information that would not otherwise be presented, or in some cases available, to investors and other users. The presentation of such information can assist users in assessing results of operations and financial position, and in predicting future earnings potential. It allows users to focus specifically on what management sees as relevant information, since it is tailored to that specific company and circumstances. In the case of BCE, the company has explained, in considerable detail, their reasons for using these measures and the reasoning seems to be solid. Internally, employees have little control over interest, depreciation and taxes, and therefore EBITDA is often a target used. Analysts and users can then see how the company measures internal results.

The problem with reporting additional earnings numbers is not so much with the practice, per se, as with how it is done. If the calculations and reasons for the items selected for adjustment are not clearly disclosed, and if a reconciliation with net income is not provided, the additional information may be confusing and/or misleading rather than aiding users in their decision making process. However, in the case of BCE, all of these non-GAAP measures have been reconciled to GAAP measurements. The other problem with these numbers is that no standards exist to ensure that they are calculated consistently, which means that it is risky to make comparisons between companies on the basis of these numbers. However, if details of the calculations are provided, then this weakness can be overcome.

In the case of this company, I do think that this presentation provides good, useful information because the company has provided detailed reconciliations and reasons supporting the usage of these non-GAAP measures.

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CHAPTER 5

FINANCIAL POSITION AND CASH FLOWS

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing Assignments
1. Classification and disclosure of items in the statement of financial position and other financial statements.	1, 4, 5, 6	1, 2, 3, 6, 7, 9, 10	6, 10	2
2. Preparation of statement of financial position; issues of format, terminology, and valuation.	3, 7, 8, 9, 10	4, 5, 6, 8, 10, 11, 12, 13	1, 2, 3, 4, 5, 7, 8, 9	3, 4
3. Statement of cash flows.	2, 11, 12, 13, 14, 15, 17	11, 14, 15, 16, 17	7, 8, 11	1
4. Review of Chapters 4 and 5.			5	
5. Analysis*	16	4, 5, 12, 18, 19	7, 8	4

*This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E5-1	Statement of financial position classifications.	Simple	15-20
E5-2	Classification of statement of financial position accounts.	Simple	15-20
E5-3	Classification of statement of financial position accounts.	Simple	15-20
E5-4	Preparation of a corrected statement of financial position and analysis.	Moderate	35-40
E5-5	Correction of a statement of financial position and analysis.	Moderate	35-40
E5-6	Preparation of a classified statement of financial position.	Simple	30-35
E5-7	Current vs. long-term liabilities.	Moderate	10-15
E5-8	Preparation of a statement of financial position.	Moderate	35-40
E5-9	Current liabilities.	Moderate	15-20
E5-10	Current asset section of the statement of financial position.	Moderate	20-25
E5-11	Preparation of a statement of financial position and statement of cash flows.	Moderate	40-45
E5-12	Current assets and current liabilities and analysis.	Complex	30-35
E5-13	Supplemental disclosures	Moderate	20-25
E5-14	Statement of cash flow and comments.	Moderate	15-20
E5-15	Statement of cash flows—classifications.	Moderate	15-20
E5-16	Operating activities – direct and indirect.	Moderate	30-35
E5-17	Statement of cash flow – indirect method.	Moderate	15-20
*E5-18	Analysis.	Moderate	15-20
*E5-19	Analysis.	Moderate	15-20
P5-1	Preparation of a classified statement of financial position.	Moderate	30-35
P5-2	Statement of financial position preparation.	Moderate	35-40
P5-3	Statement of financial position adjustment and preparation.	Moderate	40-45
P5-4	Preparation of a corrected statement of financial position.	Complex	40-45
P5-5	Income statement and statement of financial position preparation.	Moderate	30-40

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

P5-6	Reporting for financial effects of varied transactions.	Moderate	25-30
P5-7	Statement of financial position and cash flow preparation and analysis.	Moderate	40-50
P5-8	Preparation of a statement of financial position, statement of cash flows and analysis.	Moderate	40-50
P5-9	Statement of financial position adjustment and preparation.	Complex	40-45
P5-10	Critique of statement of financial position format and content.	Moderate	25-30
P5-11	Preparation and analysis of a statement of cash flows	Moderate	25-30

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 5-1

- (a) The statement of financial position provides information about a company's liquidity, solvency, and financial structure. If Larsen has poor liquidity, or poor coverage and solvency, or if Larsen is financed heavily by debt, lending funds to (and investing in) the company is riskier.**
- (b) The statement of cash flows provides information about the company's sources and uses of cash during the period. If Larsen relies significantly on external financing as a result of negative cash flow from operations, lending funds to (and investing in) the company is riskier. The statement of cash flows also helps users assess earnings quality. For example, if Larsen's net income is significantly higher than cash flow from operations, this is a sign of poor earnings quality, and a potential cause for concern to a possible lender to the company.**

BRIEF EXERCISE 5-2

The statement of cash flows helps users to evaluate the company's liquidity, solvency, and financial flexibility. Companies that are more financially flexible are better able to survive economic downturns, and have low risk of business failure.

Users of Gator Printers' statement of cash flows include shareholders, creditors, potential bondholders, management, employees, and customers. Shareholders, creditors, and potential bondholders will analyze the company's liquidity, solvency, and financial flexibility in making their investment decisions. Management will use the statement of cash flows to analyze sources and uses of cash in deciding whether or not to expand, and in deciding how to fund the expansion, if any. Employees and customers may use the statement of cash flows to assess the company's liquidity, solvency, and financial flexibility, if they are seeking a long-term employer or supplier.

BRIEF EXERCISE 5-3

Three examples of financial statement items, which are omitted from the statement of financial position because they cannot be objectively measured, and therefore not recorded, include:

1. Internally-generated goodwill
2. Intellectual capital developed from research
3. Contingent liabilities that cannot be reasonably estimated

BRIEF EXERCISE 5-4

Current assets

Cash and cash equivalents		\$7,000
FV-NI investments		11,000
Accounts receivable	\$90,000	
Less allowance for doubtful accounts	<u>(4,000)</u>	86,000
Inventory		30,000
Prepaid insurance		<u>5,200</u>
Total current assets		<u><u>\$139,200</u></u>

Cash and cash equivalents and accounts receivable are monetary assets. Fair value-net income investments could be monetary assets depending on the nature of the investments.

BRIEF EXERCISE 5-5

Long-term investments

FV – OCI investments	\$ 62,000
Land held for investment	<u>139,000</u>
Total investments	<u><u>\$201,000</u></u>

Fair Value-OCI investments are financial instruments.

BRIEF EXERCISE 5-6

Property, plant, and equipment

Land		\$71,000
Buildings	\$207,000	
Less accumulated depreciation	<u>(45,000)</u>	162,000
Equipment	190,000	
Less accumulated depreciation	<u>(19,000)</u>	171,000
Machinery under capital leases	229,000	
Less accumulated depreciation	<u>(103,000)</u>	<u>126,000</u>
Total property, plant, and equipment		<u>\$530,000</u>

BRIEF EXERCISE 5-7

Intangible assets

Patents	33,000
Franchises	47,000
Trademarks	<u>10,000</u>
Total intangible assets	<u>\$90,000</u>

Note: Goodwill would be shown separately from intangibles.

BRIEF EXERCISE 5-8

(a)

Current liabilities

Accounts payable	\$251,000
Unearned revenue	141,000
Salaries and wages payable	127,000
Interest payable	42,000
Income tax payable	9,000
Notes payable	<u>97,000</u>
Total current liabilities	<u>\$667,000</u>

All of the above with the exception of unearned revenue are monetary liabilities. Unearned revenue is non-monetary as it will generally be satisfied by delivery of goods or services, rather than monetary amounts.

Note: Any current portion for the Obligation under Capital Leases and the current portion of long term debt, such as bonds payable, would be included if listed in the balances.

Note: For the notes payable, as at statement of financial position date, there is no unconditional right to defer payment of the financial liability beyond one year. Therefore under IFRS, the financial liability must be shown as a current liability.

(b) Under ASPE, since the notes payable are refinanced by the issue date of the financial statements, with payment terms beyond one year as at statement of financial position date, the notes payable may be presented as a non-current liability.

BRIEF EXERCISE 5-9

(a) Under IFRS

Non-current liabilities

Bonds payable	\$600,000	
Less discount on bonds payable	<u>142,000</u>	\$458,000
Obligations under capital leases		<u>175,000</u>
Total non-current liabilities		<u><u>\$633,000</u></u>

In each case, these amounts would be shown net of current portion, if any.

(b) Under ASPE

Non-current liabilities

Bonds payable	\$600,000	
Less discount on bonds payable	<u>142,000</u>	\$458,000
Obligations under capital leases		175,000
Notes payable		<u>97,000</u>
Total non-current liabilities		<u><u>\$730,000</u></u>

In each case, these amounts would be shown net of current portion, if any.

BRIEF EXERCISE 5-10

Shareholders' equity

Share capital

Preferred shares	\$50,000
Common shares	700,000
Contributed surplus	<u>200,000</u>
Total share capital	950,000
Retained earnings	120,000
Accumulated other comprehensive income	
(loss)	<u>(150,000)</u>
Total shareholders' equity	<u><u>\$920,000</u></u>

BRIEF EXERCISE 5-11

The purpose of a statement of cash flows is to provide relevant information about the cash receipts and cash payments of an enterprise during a period, in order for users to determine the significant operating, investing and financing items and amounts. It differs from the statement of financial position and the income statement in that it reports the sources and uses of cash by operating, investing, and financing activity classifications. While the income statement and the statement of financial position are accrual basis statements, the statement of cash flows is a cash basis statement—non-cash items are omitted.

BRIEF EXERCISE 5-12

Cash flows from operating activities

Net income (\$500 - \$300)		\$200
Adjustments to reconcile net income to net cash provided by operating activities		
Increase in accounts receivable	(150)	
Decrease in accounts payable	<u>(400)</u>	<u>(550)</u>
Net cash used by operating activities		<u><u>\$(350)</u></u>

BRIEF EXERCISE 5-13

Cash flows from operating activities

Net income		\$151,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense	\$44,000	
Increase in accounts payable	9,500	
Increase in accounts receivable	<u>(13,000)</u>	<u>40,500</u>
Net cash provided by operating activities		<u><u>\$191,500</u></u>

BRIEF EXERCISE 5-14

Proceeds from sale of land and building	\$196,000
Purchase of land	(43,000)
Purchase of equipment	<u>(35,000)</u>
Net cash provided by investing activities	<u>\$118,000</u>

BRIEF EXERCISE 5-15

(a) Under IFRS

Issuance of common shares	\$140,000
Repurchase of company's own shares	(25,000)
Retirement of bonds	<u>(200,000)</u>
Net cash used by financing activities	<u>\$(85,000)</u>

(b) Under ASPE, because payment of cash dividend is charged to retained earnings, it would be treated as a financing activity.

Issuance of common shares	\$140,000
Repurchase of company's own shares	(25,000)
Payment of cash dividend	(58,000)
Retirement of bonds	<u>(200,000)</u>
Net cash used by financing activities	<u>\$(143,000)</u>

BRIEF EXERCISE 5-16

Free Cash Flow Analysis

Net cash provided by operating activities	\$400,000
Less: Purchase of equipment	(35,000)
 Purchase of land*	(43,000)
 Dividends	<u>(58,000)</u>
Free cash flow	<u>\$264,000</u>

***If the land were purchased as an investment, it would be excluded in the computation of free cash flow.**

BRIEF EXERCISE 5-17

(a)

Operating Activities

Net income	\$40,000	
Depreciation expense	4,000	
Increase in accounts receivable	(10,000)	
Increase in accounts payable	<u>7,000</u>	
Net cash provided by operating activities		\$41,000

Investing Activities

Purchase of equipment		(8,000)

Financing Activities

Issue note payable	20,000	
Dividends paid	<u>(5,000)</u>	
Net cash provided by financing activities		<u>15,000</u>

Net change in cash (\$41,000 – \$8,000 + \$15,000)	<u>\$48,000</u>

Free Cash Flow = \$41,000 (Net cash provided by operating activities) – \$8,000 (Purchase of equipment) – \$5,000 (Dividends) = \$28,000.

(b) Cash Flow per share = \$48,000/100,000 = \$0.48

(c) Midwest would be prohibited from providing cash flow per share in its financial statements under ASPE.

SOLUTIONS TO EXERCISES

EXERCISE 5-1 (15-20 minutes)

- 1. Long-term investment. Fair Value-OCI investments are not held with the intention of realizing direct investment gains. They are acquired for longer term strategic purposes.
Nonmonetary and Financial Instrument.**
- 2. Capital shares in shareholders' equity.
Nonmonetary and Financial Instrument.**
- 3. Current liability.
Monetary and Financial Instrument.**
- 4. Property, plant, and equipment (as a deduction or contra asset account).
Nonmonetary and not a Financial Instrument.**
- 5. If the warehouse in process of construction is being constructed for another party, it is classified as an inventory account in the current asset section. This account will be shown net of any billings on the contract. On the other hand, if the warehouse is being constructed for use by this particular company, it should be classified as a separate item in the property, plant, and equipment section.
Nonmonetary and not a Financial Instrument.**
- 6. Current asset.
Monetary and Financial Instrument.**
- 7. Current liability.
Monetary and Financial Instrument.**
- 8. Retained Earnings with a debit balance in shareholders' equity.
Nonmonetary and not a Financial Instrument.**

EXERCISE 5-1 (Continued)

- 9. Current asset.
Nonmonetary and Financial Instrument. Fair value-net income investments could be monetary depending on the nature of the investments.**
- 10. Current liability.
Monetary and not a Financial Instrument. The income tax payable is an obligation that stems from regulatory requirements and is not contractual in nature.**
- 11. Current liability.
Nonmonetary and not a Financial Instrument.**
- 12. Current asset.
Nonmonetary and not a Financial Instrument.**
- 13. Current liability.
Monetary and Financial Instrument.**
- 14. Current liability.
Nonmonetary and not a Financial Instrument. Could be seen as a Monetary Financial Instrument in the event that the company does not provide the goods or services (in which case, the company owes the deposit back to the customer in cash).**

EXERCISE 5-2 (15-20 minutes)

(a)	8	(l)	6
(b)	4	(m)	1
(c)	6	(n)	7
(d)	6	(o)	3
(e)	3	(p)	2
(f)	1	(q)	1
(g)	6	(r)	1
(h)	7	(s)	6
(i)	1	(t)	6
(j)	1	(u)	11
(k)	7		

EXERCISE 5-3 (15-20 minutes)

	Classification	Monetary	Financial Instrument
(a)	1.		
(b)	2.		X
(c)	6. or 7.		
(d)	1.		
(e)	6.		
(f)	4.		
(g)	1.	X	X
(h)	6.	X	
(i)	1.	X	X
(j)	6.	X	X
(k)	1.*		
(l)	3.		
(m)	2.	X	X
(n)	6.	X	X
(o)	X.		
(p)	3.		
(q)	11.		
(r)	6.	X	X
(s)	2.		

*** Under IFRS, a non-current asset may be reclassified as a current asset when it meets the criteria to be classified as held for sale.**

EXERCISE 5-4 (35-40 minutes)

(a)

Bruno Corp.
Statement of Financial Position
December 31, 2014

Assets			
Current assets			
Cash			\$ 290,000
FV - NI Investments			120,000
Accounts receivable	\$357,000		
Less allowance for doubtful accounts	<u>17,000</u>		340,000
Inventory, at lower of cost and net realizable value			401,000
Prepaid expenses			<u>12,000</u>
Total current assets			1,163,000
Long-term investments			
Land held for future use	175,000		
Investment in bonds to be held to maturity	<u>90,000</u>		265,000
Property, plant, and equipment			
Building	\$730,000		
Less accumulated depreciation—building	<u>160,000</u>	570,000	
Equipment	265,000		
Less accumulated depreciation—equipment	<u>105,000</u>	<u>160,000</u>	730,000
Goodwill			
			<u>80,000</u>
Total assets			<u>\$2,238,000</u>

EXERCISE 5-4 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Accounts payable			\$ 195,000
Bank overdraft			30,000
Notes payable (due next year)			125,000
Rent payable			<u>49,000</u>
Total current liabilities			<u>399,000</u>

Long-term liabilities

Bonds payable	\$500,000		
Add premium on bonds payable	<u>53,000</u>	\$553,000	
Pension obligation		<u>82,000</u>	<u>635,000</u>
Total liabilities			<u>1,034,000</u>

Shareholders' equity

Common shares, unlimited authorized issued 290,000 shares		290,000	
Contributed surplus		180,000	
Retained earnings*		<u>734,000</u>	
Total shareholders' equity			<u>1,204,000</u>
Total liabilities and shareholders' equity			<u>\$2,238,000</u>

$$*\$2,238,000 - \$1,034,000 - \$290,000 - \$180,000 = \$734,000$$

EXERCISE 5-4 (Continued)

- *(b) The bank overdraft is classified as a current liability, as there is no legal right to offset the bank overdraft against the positive cash balance. The bank accounts are at different banks. Had the bank overdraft been off set (netted) against the cash balance as originally prepared by the bookkeeper, there would have been no effect on working capital. The net amount of current assets, less current liabilities would not change in absolute amount.**

However, the classification change does affect the current ratio (current assets / current liabilities):

<u>Overdraft netted</u>	<u>Proper classification</u>
<u>\$1,163 – \$30</u>	<u>\$1,163</u>
\$399 – \$30	\$399
= 3.07	= 2.91

Those who prepared the statement of financial position likely did not do the misclassification of the bank overdraft on purpose. The bank account in overdraft is likely one of several bank accounts used by Bruno Corp. This particular account happens to fall in a temporary overdraft position as of the fiscal year end of the business.

EXERCISE 5-5 (35-40 minutes)

(a)

Garfield Corp. Statement of Financial Position As at July 31, 2014

Assets		
Current assets		
Cash		\$ 66,000*
Accounts receivable	\$ 46,700**	
Less allowance for doubtful accounts	<u>3,500</u>	43,200
Inventory		<u>65,300***</u>
Total current assets		174,500
Long-term investments		
Bond sinking fund investment		12,000
Property, plant, and equipment		
Equipment	112,000	
Less accumulated depreciation— equipment	<u>28,000</u>	84,000
Intangible assets		
Patents		<u>21,000</u>
Total assets		<u>\$291,500</u>
Liabilities and Shareholders' Equity		
Current liabilities		
Notes and accounts payable		\$ 52,000****
Income tax payable		<u>9,000</u>
Total current liabilities		61,000
Long-term liabilities		
Total liabilities		<u>75,000</u>
		136,000
Shareholders' equity		
Total liabilities and shareholders' equity		<u>155,500</u>
		<u>\$291,500</u>
* (\$69,000 – \$12,000 + \$9,000)		
** (\$52,000 – \$5,300)		
*** (\$60,000 + \$5,300)		
**** (\$44,000 + \$8,000)		

EXERCISE 5-5 (Continued)

- *(b)** Since there is no legal right to offset the credit balances in accounts receivable against any other amounts owing from customers, these balances need to be classified as a current liability, unless the amounts are deemed to be immaterial. Had the credit balances in accounts receivable been offset (netted) against other debit balances as originally presented, there would have been no effect on working capital. The net amount of current assets, less current liabilities would not change in absolute amount.

However, the classification change does affect the current ratio (current assets / current liabilities) as demonstrated below:

<u>Credit balances netted</u>	<u>Proper classification</u>
<u>\$174,500 – \$8,000</u>	<u>\$174,500</u>
<u>\$61,000 – \$8,000</u>	<u>\$61,000</u>
= 3.14	= 2.86

The persons preparing the statement of financial position likely did not feel that the credit balances in accounts receivable warranted a reclassification. They likely were not aware of the impact the credit balances would have on the current ratio. Materiality would also be a basis for leaving the credit balances to offset the debit balances in accounts receivable.

EXERCISE 5-5 (Continued)

The credit balances in accounts receivable represent amounts owing to specific customers. The following are possible conditions or situations that would give rise to a credit balance in accounts receivable:

- 1. Customers have returned goods after paying for a shipment and credit memorandums for the sales returns have been applied subsequent to collection on account.**
- 2. A customer has inadvertently overpaid an account.**
- 3. Garfield's policy on returned items does not allow a cash refund. Instead the policy calls for the credit to be applied to a future purchase on account.**
- 4. Some accounting software packages treat customer prepayments (unearned revenues) as credit balances in accounts receivable, since the customer information is part of the accounts receivable subsidiary ledger.**

EXERCISE 5-6 (30-35 minutes)

Iris Inc. Statement of Financial Position December 31, 20–

Assets			
Current assets			
Cash	\$XXX		
Less cash restricted for plant expansion	<u>XXX</u>	\$XXX	
Accounts receivable	XXX		
Less allowance for doubtful accounts	<u>XXX</u>	XXX	
Notes receivable		XXX	
Accounts receivable—officers		XXX	
Inventory			
Finished goods	XXX		
Work in process	XXX		
Raw materials	<u>XXX</u>	<u>XXX</u>	
Total current assets			\$XXX
Long-term investments			
FV - OCI Investments		XXX	
Land held for future plant site		XXX	
Cash restricted for plant expansion		<u>XXX</u>	
Total long-term investments			XXX
Property, plant, and equipment			
Buildings		XXX	
Less accumulated depreciation—buildings		<u>XXX</u>	XXX
Intangible assets			
Copyrights			<u>XXX</u>
Total assets			<u>\$XXX</u>

EXERCISE 5-6 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Salaries and wages payable	\$XXX	
Unearned subscriptions revenue	XXX	
Unearned rent revenue	<u>XXX</u>	
Total current liabilities		\$XXX

Long-term liabilities

Bonds payable, due in four years	<u>XXX</u>	
Total liabilities		XXX

Shareholders' equity

Common shares	\$XXX	
Retained earnings	<u>XXX</u>	
Total shareholders' equity		<u>XXX</u>
Total liabilities and share holders' equity		<u>\$XXX</u>

Note to instructor: An assumption made here is that cash includes the cash restricted for plant expansion. If it did not, then a subtraction from cash would not be necessary, or the cash balance would be “grossed up” and then the cash restricted for plant expansion would be deducted.

EXERCISE 5-7 (10-15 minutes)

(a)

- 1. Dividends payable of \$2,500,000 will be reported as a current liability ($1,000,000 \times \$2.50$).**
- 2. No amounts are reported as a current or long-term liability. Stock dividends distributable are reported in the shareholders' equity section.**
- 3. Bonds payable of \$25,000,000 and interest payable of \$1,750,000 ($\$100,000,000 \times 7\% \times 3/12$) will be reported as a current liability. Bonds payable of \$75,000,000 will be reported as a long-term liability.**
- 4. Customer advances of \$27,000,000 will be reported as a current liability ($\$12,000,000 + \$40,000,000 - \$25,000,000$).**
- 5. No amounts are reported as a current or long-term liability. Retained earnings appropriations are reported and often segregated in the shareholders' equity section or as a note to the financial statements related to retained earnings.**
- 6. Demand bank loans must be classified as current liabilities.**

- (b) Liabilities have two essential characteristics: they represent an economic burden or obligation, and the entity has a present obligation (which is enforceable). When Samson accepts an advance from a customer, an economic burden or obligation arises, which is satisfied when Samson provides the related goods or services. The obligation is a present obligation (which is enforceable), until the related goods or services are delivered. Earned customer advances of \$25 million no longer represent a liability because the economic burden or obligation has been satisfied.**

EXERCISE 5-8 (35-40 minutes)

(a)

Zeitz Corporation
Statement of Financial Position
December 31, 2014

<u>Assets</u>			
Current assets			
Cash		\$205,000	
FV - NI investments		153,000	
Accounts receivable	\$515,000		
Less allowance for doubtful accounts	<u>(25,000)</u>	490,000	
Inventory		<u>687,000</u>	
Total current assets			\$1,535,000
Long-term investments			
Bond investments at amortized cost		299,000	
FV - OCI Investments		<u>345,000</u>	
Total long-term investments			644,000
Property, plant, and equipment			
Land		260,000	
Building	1,040,000		
Less accumulated depreciation	<u>(152,000)</u>	888,000	
Equipment	600,000		
Less accumulated depreciation	<u>(60,000)</u>	<u>540,000</u>	
Total property, plant, and equipment			1,688,000
Intangible assets			
Intangible Assets-Franchises		160,000	
Intangible Assets-Patents		<u>195,000</u>	
Total intangible assets			<u>355,000</u>
Total assets			<u><u>\$4,222,000</u></u>

EXERCISE 5-8 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Accounts payable	\$ 545,000	
Commissions payable	136,000	
Notes payable (due in six months)	98,000	
Accrued liabilities	<u>96,000</u>	
Total current liabilities		\$ 875,000

Long-term liabilities

Notes payable	900,000	
Bonds payable	<u>1,000,000</u>	
Total long-term liabilities		<u>1,900,000</u>
Total liabilities		<u>2,775,000</u>

Shareholders' equity

Common shares	\$ 809,000	
Retained earnings**	490,000	
Accumulated other comprehensive income	<u>148,000*</u>	
Total shareholders' equity		<u>1,447,000</u>
Total liabilities and shareholders' equity		<u>\$4,222,000</u>

* FV-OCI investments – gain

(\$345,000–\$277,000)	\$68,000	
Add opening balance	<u>80,000</u>	<u>\$148,000</u>

**Calculation of Retained Earnings:

Sales revenue	\$7,960,000
Unrealized gain or loss (on investments)	63,000
Unusual gain	160,000
Cost of goods sold	(4,800,000)
Selling expenses	(1,860,000)
Administrative expenses	(900,000)
Interest expense	<u>(211,000)</u>

Net income \$ 412,000

Beginning retained earnings	\$ 218,000
Net income	412,000
Correction of prior year's error	<u>(140,000)</u>
Ending retained earnings	<u>\$ 490,000</u>

EXERCISE 5-8 (Continued)

- (b) A classified statement of financial position requires the reporting of current assets and liabilities, and the classifications are used for measurement of liquidity. The length of the operating cycle will determine what items are classified as current where the operating cycle is longer than one year. Should the business have several segments, such as in the case of Bombardier Inc., (aerospace, transportation and financing services) and the operating cycles are very different, applying one cycle length to all business segments becomes meaningless. In cases such as this, the consolidated statement of financial position is not classified.**

EXERCISE 5-9 (15-20 minutes)

- 1. Because the likelihood of payment is remote, accrual of a liability is not required. Case by case examination is required with respect to all lawsuits.**
- 2. A current liability of \$150,000 should be recorded.**
- 3. A current liability for accrued interest of \$6,000 ($\$900,000 \times 8\% \times 1/12$) should be reported. Any portion of the \$900,000 note that is payable within one year from the statement of financial position date should be shown as a current liability. Otherwise, the \$900,000 note payable would be a long-term liability.**
- 4. Although bad debts expense of \$200,000 should be debited and the allowance for doubtful accounts credited for \$200,000, this does not result in a liability. The allowance for doubtful accounts is a valuation account (contra asset) and is deducted from accounts receivable on the statement of financial position.**
- 5. A current liability of \$80,000 ($\$2 \times 40,000$) should be reported. The liability is recorded on the date of declaration.**
- 6. Customer advances of \$110,000 ($\$160,000 - \$50,000$) will be reported as a current liability if the advances are expected to be earned within one year.**

EXERCISE 5-10 (20-25 minutes)

(a)

Current assets

Cash	\$ 92,000*	
Less cash restricted for plant expansion	<u>(50,000)</u>	\$42,000
FV - NI investments		29,000
Accounts receivable (of which \$50,000 is pledged as collateral on a bank loan)	161,000	
Less allowance for doubtful accounts	<u>(12,000)</u>	149,000
Notes receivable		40,000
Interest receivable **		1,600
Inventory at lower of FIFO cost and net realizable value		
Finished goods	52,000	
Work-in-process	34,000	
Raw materials	<u>187,000</u>	<u>273,000</u>
Total current assets		<u><u>\$534,600</u></u>

*An acceptable alternative is to report cash at \$42,000 and report the cash restricted for plant expansion in the non-current investments section of the statement of financial position. (\$50,000 + \$50,000 – \$8,000)

** [(\$40,000 X 6%) X 8/12]

EXERCISE 5-10 (Continued)

- (b) An alternative to the presentation of the details (for example of the three categories of inventory) as shown above is to provide disclosure in a table within the notes to the financial statements. This provides a more condensed format of the statement of financial position. This allows easier comparisons of balances, especially when presented on a comparative basis. References to the notes containing the detail would be added to the captions appearing on the face of the statement of financial position as a cross-reference.**

A second possible alternative to the presentation of information is parenthetical disclosure on the face of the statement of financial position. Although not a required disclosure, the balance of accounts receivable could be presented: “net of allowance for doubtful accounts of \$12,000.”

EXERCISE 5-11 (40-45 minutes)

(a)

Zezulka Corporation
Statement of Financial Position
December 31, 2014

Assets			
Current assets			\$1,580,500^a
FV – OCI Investments			20,500
Property, plant, and equipment			
Land		\$ 30,000	
Building (\$1,120,000 + \$31,000)	\$1,151,000		
Less accumulated depreciation (\$130,000 + \$4,000)	<u>(134,000)</u>	1,017,000	
Equipment (\$320,000 – \$20,000)	300,000		
Less accumulated depreciation (\$11,000 – \$8,000 + \$9,000)	<u>(12,000)</u>	<u>288,000</u>	
Total			1,335,000
Intangible assets			
Patents, net (\$40,000 – \$3,000)			<u>37,000</u>
Total assets			<u>\$2,973,000</u>
Liabilities and Shareholders' Equity			
Current liabilities (\$1,020,000 + \$213,000)			\$1,233,000
Long-term liabilities			
Bonds payable (\$1,100,000 + \$75,000)			<u>1,175,000</u>
Total liabilities			2,408,000
Shareholders' equity			
Common shares	\$180,000		
Retained earnings*	<u>385,000</u>		
Total shareholders' equity			<u>565,000</u>
Total liabilities and shareholders' equity			<u>2,973,000</u>

* (\$174,000 + \$391,000 – \$180,000)

^a The amount determined for current assets is calculated last and is a forced figure. That is, total liabilities, shareholders' equity and other asset balances are calculated because information is available to determine these amounts.

EXERCISE 5-11 (Continued)

(b)

Zezulka Corporation Statement of Cash Flows For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$391,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Loss on sale of equipment		
[((\$20,000 – \$8,000) – \$10,000)]	\$ 2,000	
Depreciation expense		
(\$4,000 + \$9,000)	13,000	
Patent amortization expense	3,000	
Increase in current liabilities	213,000	
Increase in current assets (other than cash)	(229,000)	<u>2,000</u>
Net cash provided by operating activities		393,000
Cash flows from investing activities		
Proceeds from sale of equipment	10,000	
Addition to building	(31,000)	
Purchase of investment in shares	(20,500)	
Net cash used by investing activities		(41,500)
Cash flows from financing activities		
Issuance of bonds	75,000	
Payment of dividends	(180,000)	
Net cash used by financing activities		(105,000)
Net increase in cash		<u>\$246,500^b</u>

^b An additional proof to arrive at the increase in cash is provided as follows:

Total current assets—end of period [from part (a)]	\$1,580,500
Total current assets—beginning of period	<u>1,105,000</u>
Increase in current assets during the period	475,500
Increase in current assets other than cash	<u>229,000</u>
Increase in cash during year	<u>\$ 246,500</u>

EXERCISE 5-12 (30-35 minutes)

(a) **Agincourt Corp.**
Partial Statement of Financial Position
As at December 31, 2014

Current assets		
Cash		\$30,476*
Accounts receivable	\$91,300**	
Less allowance for doubtful accounts	<u>7,000</u>	84,300
Inventory		161,000***
Prepaid expenses		<u>9,000</u>
Total current assets		<u>\$284,776</u>
Current liabilities		
Accounts payable		\$113,000^a
Notes payable		<u>55,000^b</u>
Total current liabilities		<u>\$168,000</u>
* Cash balance		\$ 40,000
Add: Cash disbursement after discount [\$35,000 X 98%]		<u>34,300</u>
		74,300
Less: Cash sales in January (\$30,000 – \$21,500)		(8,500)
Cash collected on account		(23,324)
Bank loan proceeds (\$35,324 – \$23,324)		<u>(12,000)</u>
Adjusted cash		<u>\$30,476</u>
** Accounts receivable balance		\$ 89,000
Add: Accounts reduced from January collection (\$23,324 plus 2% discount of \$476)		<u>23,800</u>
		112,800
Deduct: Accounts receivable in January		<u>(21,500)</u>
Adjusted accounts receivable		<u>\$ 91,300</u>

EXERCISE 5-12 (Continued)

*** Inventory		\$171,000
Less: Inventory received on consignment		<u>(10,000)</u>
Adjusted inventory		<u><u>\$161,000</u></u>
 a		
Accounts payable balance		\$ 61,000
Add: Cash disbursements	\$35,000	
Purchase invoice omitted		
(\$27,000 – \$10,000)	<u>17,000</u>	<u>52,000</u>
Adjusted accounts payable		<u><u>\$113,000</u></u>
 b		
Notes payable balance		\$ 67,000
Less: Proceeds of bank loan		<u>(12,000)</u>
Adjusted notes payable		<u><u>\$ 55,000</u></u>

***(b) Current ratio – Deteriorated dramatically**

<u>Before Restatement</u>	<u>Restated</u>
<u>\$302,000</u>	<u>\$284,776</u>
<u>\$128,000</u>	<u>\$168,000</u>
= 2.359	1.695

(c) Adjustment to retained earnings balance:		
Add: January sales discounts		
[((\$23,324 ÷ 98%) X .02]		\$ 476
Deduct:		
January sales	\$30,000	
January purchase discounts		
(\$35,000 X 2%)	700	
December purchases		
(\$27,000 – \$10,000)	17,000	
Consignment inventory	<u>10,000</u>	<u>(57,700)</u>
Decrease to retained earnings		<u><u>\$(57,224)</u></u>

EXERCISE 5-12 (Continued)

- (d) Agincourt's bank manager is relying on the information in the statement of financial position as at December 31, 2014 to assess if a new bank loan should be extended to the company. Before restatement, Agincourt's current ratio is 2.359, and after restatement, Agincourt's current ratio is 1.695. The adjustments are material because they result in a current ratio that is much closer to the minimum required current ratio, and would likely affect the bank manager's decision to extend a new bank loan to Agincourt. In order for financial statements to be useful, relevant, and faithfully representative, they must be free from error and bias. Recording of the adjustments is necessary in order to provide financial statement users with useful and complete information to use in their investment and credit decisions.**

EXERCISE 5-13 (20-25 minutes)

- 1. Contingency.** Under IFRS, a provision is recognized in income and as a liability if it is probable (more likely than not) that the confirming future event will occur. In this example, it is not likely that damages will be awarded to the plaintiff, and so it is considered a contingent loss that is not recognized. However, the contingency would be disclosed in the notes to financial statements if the possibility of an outflow of company resources is not remote.
- 2. Subsequent event.** This event provides evidence about conditions that did not exist at the statement of financial position date, but arose subsequent to that date, and therefore adjustment of the statement of financial position as at December 31, 2014 is not required. However, this event may have to be disclosed in the notes to financial statements to keep the financial statements from being misleading.
- 3. Provision.** Under IFRS, a provision is recognized in income and as a liability if it is probable (more likely than not) that the confirming event will occur. According to Janix's legal counsel, Janix will likely lose the lawsuit; therefore a provision should be recognized. IFRS requires that the "expected value" of the loss be used to measure the liability. If \$850,000 payout and \$950,000 payout are equally probable, the liability should be measured at \$900,000.
- 4. Commitment.** Under IFRS, if the unavoidable costs of completing the contract are higher than the benefits expected from receiving the contracted goods or services, a loss provision is recognized. In this example, the cost per inventory unit has decreased, therefore under IFRS, if the contract is non-cancellable, a loss provision should be recognized in the amount of \$400,000 ($200,000 \times [\$12 - \$10]$).
- 5. Commitment.** Commitments that obligate a company must be disclosed if they are material. A restriction on payment of dividends should be disclosed in the notes to financial statements, because it is likely to be considered material.

EXERCISE 5-13 (Continued)

- 6. Subsequent event. This event provides evidence about conditions that did not exist at the statement of financial position date, but arose subsequent to that date, and therefore adjustment of the statement of financial position as at December 31, 2014 is not required. However, this event may have to be disclosed in the notes to financial statements to keep the financial statements from being misleading.**

EXERCISE 5-14 (15-20 minutes)

(a)

**Carmichael Industries Inc.
Statement of Cash Flows
For the Year Ended December 31, 2014**

Cash flows from operating activities		
Net income		\$129,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$27,000	
Increase in accounts receivable	(50,000)	
Increase in inventory	(31,000)	
Decrease in accounts payable	<u>(7,000)</u>	<u>(61,000)</u>
Net cash provided by operating activities		68,000
Cash flows from investing activities		
Purchase of equipment	(60,000)	
Proceeds from sale of land	<u>39,000</u>	
Net cash used by investing activities		(21,000)
Cash flows used by financing activities		
Payment of cash dividends	<u>(60,000)</u>	
Net cash used by financing activities		<u>(60,000)</u>
Net decrease in cash		(13,000)
Cash at beginning of year		<u>34,000</u>
Cash at end of year		<u><u>\$21,000</u></u>

Note: During the year, Carmichael retired \$50,000 in bonds payable by issuing common shares.

(b) Carmichael managed to generate sufficient cash from operations to finance a strong dividend payout ratio of 46.5% (\$60,000 divided by \$129,000). The cash generated from the sale of land was used to purchase equipment. There are some indications that too much cash is tied up in current assets, from the dramatic increase in both the accounts receivable and the inventory balances over the year.

EXERCISE 5-15 (15-20 minutes)

A) Direct method

- (a) 3.
- (b) 2.
- (c) 3.
- (d) 2.
- (e) 4.
- (f) 4.
- (g) 4.
- (h) 3.*
- (i) 4.
- (j) 4.
- (k) 1.
- (l) 1.
- (m) 1.*
- (n) 1.**

B) Indirect method

- (a) 3.
- (b) 2.
- (c) 3.
- (d) 2
- (e) 1.
- (f) 1.
- (g) 4.
- (h) 3.*
- (i) 4.
- (j) 1.
- (k) 1.
- (l) 1.
- (m) 1.*
- (n) 1.**

*** Under ASPE, interest and dividends paid are operating activities if recognized in net income. If charged directly to retained earnings, they are presented as financing activities. (Under IFRS, interest and dividends paid may be presented as either operating or financing activities.)**

EXERCISE 5-15 (Continued)

**** Under ASPE, interest and dividends received are presented as operating activities. (Under IFRS, interest and dividends received may be presented as either operating or investing activities.)**

EXERCISE 5-16 (30-35 minutes)

(a)

**Kneale Transport Inc.
Partial Statement of Cash Flows
For the Year Ended December 31, 2014**

Cash flows from operating activities

Net income		\$148,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$70,000	
Gain on sale of equipment	(25,000)	
Decrease in accounts receivable	10,000	
Increase in prepaid insurance	(3,000)	
Decrease in accounts payable	(11,000)	
Increase in interest payable	1,250	
Increase in income taxes payable	3,500	
Decrease in unearned revenue	(4,000)	<u>41,750</u>
Net cash provided by operating activities		<u>\$189,750</u>

(b)

**Kneale Transport Inc.
Partial Statement of Cash Flows
For the Year Ended December 31, 2014**

Cash flows from operating activities

Cash received from customers (1)		\$551,000
Cash payments		
For operating expenses (2)	\$314,000	
For interest (3)	8,750	
For income tax (4)	<u>38,500</u>	<u>361,250</u>
Net cash provided by operating activities		<u>\$189,750</u>

EXERCISE 5-16 (Continued)

(a)

(1) Cash received from customers	
Revenues from fees	\$545,000
Add: Decrease in accounts receivable (\$60,000 – \$50,000)	\$10,000
Less: Decrease in unearned revenue (\$14,000 – \$10,000)	<u>(4,000)</u>
Cash receipts from customers	<u>\$551,000</u>

(2) Cash payments for operating expenses	
Operating expenses	\$300,000*
Add: Increase in prepaid insurance (\$5,000 – \$8,000)	3,000
Decrease in accounts payable (\$41,000 – \$30,000)	<u>11,000</u>
Cash payments for operating expenses	<u>\$314,000</u>

* \$370,000 – \$70,000 = \$300,000

(3) Cash payments for interest	
Interest expense	\$10,000
Less: Increase in interest payable (\$2,000 – \$750)	<u>(1,250)</u>
Cash payments for interest	<u>\$ 8,750</u>

(4) Cash payments for income tax	
Income tax expense	\$42,000
Less: Increase in income tax payable (\$8,000 – \$4,500)	<u>(3,500)</u>
Cash payments for income tax	<u>\$38,500</u>

EXERCISE 5-16 (Continued)

- (c) The indirect method focuses on the differences between net income and cash flow from operating activities. A user of Kneale's financial statements would find this information useful in that it provides a useful link between the statement of cash flows, the income statement, and the statement of financial position. The direct method shows operating cash receipts and payments, which is more consistent with the objective of the statement of cash flows (that is, to provide information about the company's sources and uses of cash). A user of Kneale's financial statements would find this information useful in estimating future cash flow from operating activities.**

EXERCISE 5-17 (15-20 minutes)

Marubeni Corporation Statement of Cash Flows For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$37,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$6,000	
Gain on sale of equipment	(3,000)*	
Increase in accounts receivable	(3,000)	
Increase in accounts payable	<u>5,000</u>	<u>5,000</u>
Net cash provided by operating activities		42,000
Cash flows from investing activities		
Proceeds from sale of equipment	8,000	
Purchase of equipment	<u>(17,000)**</u>	
Net cash used by investing activities		(9,000)
Cash flows from financing activities		
Issuance of common shares	20,000	
Payment of cash dividends	<u>(13,000)</u>	
Net cash provided by financing activities		<u>7,000</u>
Net increase in cash		40,000
Cash at beginning of year		<u>13,000</u>
Cash at end of year		<u><u>\$53,000</u></u>

* \$8,000 - \$5,000

** \$27,000 + \$12,000 - \$22,000

***EXERCISE 5-18 (15-20 minutes)**

(a) Current Ratio :

<u>2014</u>	<u>2013</u>
$\frac{\$53,000 + \$91,000}{\$20,000}$	$\frac{\$13,000 + \$88,000}{\$15,000}$
= 7.20	= 6.73

Debt to total assets ratio:

<u>2014</u>	<u>2013</u>
$\frac{\$20,000}{\$161,000}$	$\frac{\$15,000}{\$112,000}$
= 12.4%	= 13.4%

Free cash flow:

	<u>2014</u>
Net cash provided by operating activities	\$42,000
Less: Purchase of equipment	(17,000) *
Dividends paid	(13,000)
Free cash flow	<u>\$12,000</u>

*Some companies may use the net investing cash outflow of \$9,000, which would increase the amount of free cash flow to \$20,000. It is important to understand how companies define free cash flow when interpreting the ratio.

(b) Marubeni's current ratio has increased slightly from 2013 to 2014, and remains in excess of 6. The debt to total assets ratio has declined and remains at a very low percentage. The accounts receivable are climbing slightly and could be investigated. The company has excellent liquidity and financial flexibility.

***EXERCISE 5-19 (15-20 minutes)**

(a)	<u>2014</u>	<u>2013</u>
Current ratio*	6.63	4.69
Acid test ratio**	2.40	1.49

***2014: (\$21,000 + \$104,000 + \$220,000)/\$52,000**

2013: (\$34,000 + \$54,000 + \$189,000)/\$59,000

****2014: (\$21,000 + \$104,000)/\$52,000**

2013: (\$34,000 + \$54,000)/\$59,000

- (b) Current cash debt coverage – Net cash provided from operating activities divided by average current liabilities:**

Its current cash debt coverage is 1.23 to 1 $\frac{\$68,000}{\$55,500}$

- (c) Carmichael's current and acid test ratios are both in excess of 1 and they both exhibit an increasing trend from 2013 to 2014. Its current cash debt coverage is excellent at 1.23 to 1. However, free cash flow (\$68,000 - \$60,000 - \$60,000) is negative in 2014. Note also that accounts receivable and inventories have increased substantially from 2013 to 2014. While these increases impact liquidity ratios positively, if Carmichael has difficulty in collecting receivables or if sales slow and the inventory is not converted to cash, Carmichael's liquidity and financial flexibility will be negatively affected.**

TIME AND PURPOSE OF PROBLEMS

Problem 5-1 (Time 30-35 minutes)

Purpose—to provide the student with the opportunity to prepare a statement of financial position, given a set of accounts. No monetary amounts are to be reported.

Problem 5-2 (Time 35-40 minutes)

Purpose—to provide the student with the opportunity to prepare a complete statement of financial position, involving dollar amounts. A unique feature of this problem is that the student must solve for the retained earnings balance. Providing additional disclosure is also required.

Problem 5-3 (Time 40-45 minutes)

Purpose—to provide an opportunity for the student to prepare a statement of financial position in good form. Emphasis is given in this problem to additional important information that should be disclosed. For example, an inventory valuation method, bank loans secured by long-term investments, and information related to the share capital accounts must be disclosed.

Problem 5-4 (Time 40-45 minutes)

Purpose—to provide the student with the opportunity to analyze a statement of financial position and correct it where appropriate. The statement of financial position as reported is incomplete, uses poor terminology, and is in error. This is a challenging problem.

Problem 5-5 (Time 30-40 minutes)

Purpose—to review Chapters 4 and 5. The student must prepare an income statement and statement of financial position using information from records prepared on a cash basis.

Problem 5-6 (Time 25-30 minutes)

Purpose—to provide a varied number of financial transactions and events and then determine how each of these items should be reported in the financial statements. Accounting principle changes, additional assessments of income taxes, corrections of prior years' errors, and changes in estimates and subsequent events are some of the financial transactions presented.

TIME AND PURPOSE OF PROBLEMS (Continued)

Problem 5-7 (Time 40-50 minutes)

Purpose—to provide the student with an opportunity to prepare a condensed statement of financial position and a more complex statement of cash flows from selected transactions and perform some ratio analysis. The student is also required to explain the patterns of the cash flows that are being reported.

Problem 5-8 (Time 40-50 minutes)

Purpose—to provide the student with an opportunity to prepare a complete statement of cash flows. A condensed statement of financial position is also required along with selected ratios. The student is also required to explain the usefulness of the statement of cash flows and discuss the patterns of the cash flows that are being reported. Problem areas flagged on the cash flow must be discussed and addressed. Because the textbook does not explain in Chapter 5 all of the steps involved in preparing the statement of cash flows, assignment of this problem is dependent upon additional instruction by the instructor or knowledge gained in introductory financial accounting. This is a comprehensive problem.

Problem 5-9 (Time 40-45 minutes)

Purpose—to provide the student with the opportunity to prepare a statement of financial position in good form. Additional information is provided on each asset and liability category for purposes of preparing the statement of financial position. Students are also asked about the appropriateness about possible condensed formats of presenting information on the statement of financial position. This is a challenging problem.

Problem 5-10 (Time 25-30 minutes)

Purpose—to present a statement of financial position that must be analyzed to assess its deficiencies. Items such as improper classification, terminology, and disclosure must be considered.

Problem 5-11 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to prepare a complete statement of cash flows. A comparative statement of financial position is provided. The student is also required to analyze the statement of cash flows from the perspective of a shareholder.

SOLUTIONS TO PROBLEMS

PROBLEM 5-1

Company Name
Statement of Financial Position
December 31, 20XX

Assets

Current assets

Cash*

Less restricted cash

FV - NI investments

Accounts receivable

Less allowance for doubtful accounts

Interest receivable

Advances to employees

Inventory

Prepaid rent

Total current assets

Long-term investments

Notes receivable due in five years

Land Held for future plant site

FV – OCI investments

Restricted cash

Total long-term investments

Property, plant, and equipment

Land

Buildings

Less accumulated depreciation—buildings

Equipment

Less accumulated depreciation—equipment

Total property, plant, and equipment

Intangible assets

Patents (net of amortization)

Copyrights (net of amortization)

Total intangible assets

Total assets

PROBLEM 5-1 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

- Notes payable**
- Income tax payable**
- Salaries and wages payable**
- Dividends payable**
- Unearned subscriptions revenue**
- Total current liabilities**

Long-term liabilities

- Bonds payable**
- Plus premium on bonds payable**
- Pension obligation**
- Total long-term liabilities**
- Total liabilities**

Shareholders' equity

- Capital shares**
 - Preferred shares (description)**
 - Common shares (description)**
- Total capital shares**
- Retained earnings**
- Accumulated other comprehensive income**
- Total shareholders' equity**
- Total liabilities and shareholders' equity**

*** Cash includes cash and petty cash**

PROBLEM 5-2

(a)

**Montoya Inc.
Statement of Financial Position
December 31, 2014**

Assets			
Current assets			
Cash			\$ 360,000
FV - NI	Investments		121,000
Notes receivable			445,700
Income taxes receivable			97,630
Inventory			239,800
Prepaid expenses			<u>87,920</u>
Total current assets			1,352,050
Property, plant, and equipment			
Land		\$ 480,000	
Building	\$1,640,000		
Less accumulated depreciation—building	<u>270,200</u>	1,369,800	
Equipment	<u>1,470,000</u>		
Less accumulated depreciation—equipment	<u>292,000</u>	<u>1,178,000</u>	3,027,800
Goodwill			<u>125,000</u>
Total assets			<u><u>\$4,504,850</u></u>
Liabilities and Shareholders' Equity			
Current liabilities			
Accounts payable			\$ 490,000
Notes payable			265,000
Payroll taxes payable			177,591
Income tax payable			98,362
Rent payable			<u>45,000</u>
Total current liabilities			1,075,953

PROBLEM 5-2 (Continued)

Long-term liabilities

Notes payable	\$1,600,000	
Bonds payable, due 2019, net of discount of \$15,000	285,000	
Rent payable	<u>480,000</u>	<u>2,365,000</u>
Total liabilities		<u>3,440,953</u>

Shareholders' equity

Capital shares		
Preferred shares; 20,000 shares authorized, 15,000 shares issued	150,000	
Common shares; 400,000 shares authorized, 20,000 shares issued	<u>200,000</u>	<u>350,000</u>
Retained earnings		<u>713,897*</u>
Total shareholders' equity		<u>1,063,897**</u>
Total liabilities and shareholders' equity		<u>\$4,504,850</u>

* (\$1,063,897 – \$350,000)

** (\$4,504,850 – \$3,440,953)

- (b) In order to allow the reader of the statement of financial position to assess the timing of the future cash outflows concerning future rentals, a table illustrating the amount and the timing of the cash flows for each of the next five years and amounts beyond five years would be provided in the notes to the financial statements.

PROBLEM 5-3

(a)

**Eastwood Inc.
Statement of Financial Position
December 31, 2014**

Assets			
Current assets			
Cash		\$ 41,000	
Accounts receivable	\$163,500		
Less allowance for doubtful accounts	<u>8,700</u>		
		154,800	
Inventory—at lower of FIFO cost/NRV		208,500	
Prepaid insurance		<u>5,900</u>	
Total current assets			\$ 410,200
Long-term investments			
FV – OCI investments, of which investments costing \$120,000 have been pledged as security for notes payable to bank			478,000
Property, plant, and equipment			
Cost of uncompleted plant facilities			
Land	\$ 85,000		
Building in process of construction	<u>124,000</u>	209,000	
Equipment	400,000		
Less accumulated depreciation	<u>240,000</u>	<u>160,000</u>	369,000
Intangible assets			
Patents (net of accumulated amortization of \$4,000)		<u>36,000</u>	
Total assets		<u>\$1,293,200</u>	

PROBLEM 5-3 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Notes payable to bank, secured by investments which cost \$120,000	\$ 94,000	
Accounts payable	148,000	
Accrued liabilities	<u>49,200</u>	
Total current liabilities		\$ 291,200

Long-term liabilities

11% bonds payable, \$200,000, due January 1, 2025, at amortized cost	<u>180,000</u>	
Total liabilities		<u>471,200</u>

Shareholders' equity

Capital shares		
Common shares; 600,000 shares authorized, 500,000 shares issued and outstanding	500,000	
Retained earnings	138,000	
Accumulated other comprehensive income	<u>184,000*</u>	<u>822,000</u>
Total liabilities and shareholders' equity		<u><u>\$1,293,200</u></u>

* Opening balance of \$45,000 + \$139,000 (\$478,000 – \$339,000) for unrealized holding gain – OCI on Fair Value- OCI investments.

- (b) If the Construction in Process account represents the costs of construction of a building for resale, the account is an inventory account, and a current asset. However, the Construction in Process account in Eastwood's trial balance represents the costs of construction of a building for use by Eastwood, which is a property, plant, and equipment account, and a long-term asset. Incorrect classification of the Construction in Process account as an inventory account would overstate current assets, which is a measure that a potential creditor would use in evaluating Eastwood's liquidity. Incorrect classification of accounts presents biased and misleading information on the statement of financial position. Proper classification of accounts is necessary in presenting a statement of financial position that is useful and faithfully representative.

PROBLEM 5-4

(a)

Delacosta Corporation Statement of Financial Position December 31, 2014

Assets			
Current assets			
Cash		\$175,900	
FV - NI investments			
		75,000	
Accounts receivable		170,000	
Inventory		<u>312,100</u>	
Total current assets			\$733,000
Long-term investments			
FV - OCI investments		200,000	
Assets allocated to trustee for expansion:			
Cash	\$120,000		
Treasury notes, at fair value	<u>138,000</u>	<u>258,000</u>	
Total long-term investments			458,000
Property, plant, and equipment			
Land		950,000	
Buildings	\$1,070,000^a		
Less accumulated depreciation—buildings	<u>410,000</u>	<u>660,000</u>	<u>1,610,000</u>
Total assets			<u><u>\$2,801,000</u></u>
Liabilities and Shareholders' Equity			
Current liabilities			
Current portion of notes payable		\$100,000	
Income tax payable		<u>75,000</u>	
Total current liabilities			\$ 175,000
Long-term liabilities			
Notes payable			<u>500,000^b</u>
Total liabilities			675,000

PROBLEM 5-4 (Continued)

Shareholders' equity

Common shares

Unlimited number of shares authorized,

1,000,000 shares issued

\$1,150,000

Retained earnings

611,000^c

Accumulated other comprehensive income

365,000^d

Total shareholders' equity

2,126,000

Total liabilities and shareholders' equity

\$2,801,000

^a \$1,640,000 – \$570,000 (to eliminate the excess of appraisal value over cost from the building account. Note that the appreciation capital account is also deleted.)

Note to instructor: If the company followed IFRS and the IAS 16 revaluation model of accounting for property, plant, and equipment was used, then it may be appropriate to revalue the building to its fair value. However, the depreciation would be based on the new revaluation model carrying amount, not on the original cost.

^b \$600,000 – \$100,000 (to reclassify the currently maturing portion of the note payable as a current liability.)

^c \$706,000 – \$70,000 – \$25,000 (to remove the value of goodwill from retained earnings and to reflect the unrealized holding loss on fair value-net income investments of \$25,000. Note that the goodwill account is also deleted.)

^d \$252,000 + \$113,000 (to reflect the unrealized holding gain of \$113,000 on Fair Value-OCI investments.)

Note: As an alternative presentation, the cash restricted for plant expansion could be added to the general cash account and then subtracted. The amount reported in the long-term investments section would not change.

PROBLEM 5-4 (Continued)

(b) Goodwill that is internally generated is not capitalized in the accounts, because measuring the components of internally generated goodwill is simply too complex and subjective, and because no transaction has taken place with outside parties. Goodwill is an asset representing the future economic benefits arising from other assets in a business combination that are not individually identified and separately recognized. Proper accounting of goodwill is necessary to present a statement of financial position that is useful and faithfully representative, and does not overstate assets.

PROBLEM 5-5

(a)

**MLT Inc.
Income Statement
For the Five Months Ended May 31, 2014**

Sales (\$22,770 + \$5,320 + \$4,336)		\$32,426
Cost of goods sold		
Purchases (\$14,400 + \$256 – \$130)	\$14,526	
Less inventory—May 31, 2014	<u>(2,075)</u>	<u>12,451</u>
Gross profit		19,975
Operating expenses		
Salaries and wages (\$5,500 + \$270)	5,770	
Utilities (\$4,000 + \$270)	4,270	
Rent (\$1,800 X 5/6)	1,500	
Insurance (\$1,920 X 5/12)	800	
Advertising	424	
Depreciation ([\$3,600 , 5] X 5/12)	300	
Maintenance	<u>110</u>	<u>13,174</u>
Income from operations		6,801
Interest expense*		<u>93</u>
Income before income taxes		6,708
Income taxes (20%)		<u>1,342</u>
Net income		<u><u>\$5,366</u></u>
 Earnings per share (\$5,366 , 1,000)		 <u><u>\$5.37</u></u>

*Quarterly principal payments are calculated as follows:

Total principal	\$2,880
Total quarters	<u>12</u>
Quarterly payments	<u><u>\$ 240</u></u>

On April 1, 2014, interest was paid as follows:

$$2,880 \times 8\% \times 3/12 = \$58$$

PROBLEM 5-5 (Continued)

First payment on April 1 is therefore:

Principal	\$240
Interest	<u>58</u>
Total payment	<u>\$298</u>

Interest for April and May then is as follows:

Interest $[(\$2,880 - \$240) \times 8\% \times 2/12]$ \$35

Interest expense through May 31 is therefore as follows:

Jan. - Mar.	\$ 58
April - May	<u>35</u>
	<u>\$ 93</u>

(b)

MLT Inc. Statement of Financial Position May 31, 2014

Assets		
Current assets		
Cash (\$33,600 – \$32,052)		\$ 1,548
Accounts receivable		4,336
Inventory of baking materials— at cost		2,075
Prepaid insurance (\$1,920 X 7/12)		1,120
Prepaid rent (\$1,800 X 1/6)		<u>300</u>
Total current assets		9,379
Property, plant, and equipment		
Display cases and equipment	\$3,600	
Less accumulated depreciation	<u>300</u>	<u>3,300</u>
Total assets		<u>\$12,679</u>

PROBLEM 5-5 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Current portion of bank loan (\$240 X 4)	\$ 960
Accounts payable (\$256 + \$270)	526
Salaries and wages payable	270
Income tax payable	1,342
Interest payable [(\$2,880 – \$240) X .08 X 2/12]	<u>35</u>
Total current liabilities	3,133

Long-term liabilities

Bank loan (\$2,880 – \$240)	\$2,640
Less current maturities	<u>960</u>
Total long-term liabilities	<u>1,680</u>
Total liabilities	4,813

Shareholders' equity

Common shares, 1,000 shares issued and outstanding	2,500
Retained earnings	<u>5,366</u>
Total shareholders' equity	<u>7,866</u>
Total liabilities and shareholders' equity	<u>\$12,679</u>

- (c) **Current Ratio = \$9,379 / \$3,133 = 2.99**
Times Interest Earned Ratio = \$6,801 / \$93 = 73.13

MLT's current ratio is well in excess of 1, and MLT's times interest earned ratio is very high. These ratios are indicators of excellent liquidity and coverage, respectively, and the bank manager may extend the financing based on this information. Alternatively, the bank manager may perform additional analysis before coming to a decision, including benchmarking against competitor companies, and comparison of results to accrual basis results of a comparable prior period.

PROBLEM 5-6

- 1. The new estimate would be used in computing depreciation expense for 2014. No adjustment of the balance in accumulated depreciation at the beginning of the year would be made. Instead, the remaining depreciable cost would be divided by the estimated remaining life. This is not a change in accounting principle, but rather a change in estimate, which requires prospective treatment. Disclosure in the notes to the financial statements is appropriate, if material.**
- 2. The additional assessment should be shown on the current period's income statement. If material it should be shown separately; if immaterial it could be included with the current year's income tax expense. Only if the additional assessment were from the correction of an error should it appear on the statement of retained earnings and any comparative numbers that would appear in the financial statements. If the assessment was due to an error, details should be discussed in the notes to financial statements.**
- 3. The effect of the error at December 31, 2013, should be shown as an adjustment of the beginning balance of retained earnings on the statement of retained earnings (net of applicable income taxes). The current year's expense should be adjusted (if necessary) for the possible carry forward of the error into the 2014 expense computation. Any comparative figures appearing on the financial statements would also have to be retroactively adjusted, and details of the error should be discussed in the notes to financial statements.**
- 4. The declaration of the cash dividend will be reflected as a reduction in retained earnings in the statement of retained earnings and will also result in a current liability on the statement of financial position at December 31, 2014 as the payment date is February 1, 2015.**

PROBLEM 5-6 (Continued)

- 5. The fact that the change in accounting policy took place should be disclosed together with the reason for the change and the effect of the change. The change destroys the comparability of financial statements at December 31, 2013 and December 31, 2014. The change should be applied retroactively, and the financial statements of all prior accounting periods presented should be restated. The beginning balance of the current period retained earnings statement would be consequently affected. If the effect of the change is not reasonably determinable for individual prior periods, an adjustment should be made to the beginning balance of retained earnings for the current accounting period.**
- 6. The flood loss is an event that provides evidence about conditions that did not exist at the statement of financial position date but are subsequent to that date, and does not require adjustment of the financial statements. Disclosure in the notes to the financial statements as a “subsequent event” is appropriate, if material, especially if the loss is uninsured.**
- 7. The retirement and appointment of a new president do not cause any changes in financial statement elements and as such would not require any disclosure in the financial statements. However, there would be clear disclosure of this information elsewhere in the annual report.**

PROBLEM 5-7

(a)

Aero Inc.
Statement of Financial Position
December 31, 2014

<u>Assets</u>		<u>Liabilities and Shareholders' Equity</u>	
Cash	\$ 70,200	Accounts payable	\$40,000
Accounts receivable	42,000	Bonds payable	71,000 (3)
Equipment (net)	69,000 (1)	Common shares	130,000 (4)
Land	<u>108,000 (2)</u>	Retained earnings	<u>48,200 (5)</u>
	<u>\$289,200</u>		<u>\$289,200</u>

(1) \$81,000 – \$12,000

(2) \$40,000 + \$38,000 + \$30,000

(3) \$41,000 + \$30,000

(4) \$100,000 + \$30,000

(5) \$23,200 + \$35,000 – \$10,000

PROBLEM 5-7 (Continued)

(b)

Aero Inc.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$35,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense	\$12,000	
Loss on sale of investments	5,000	
Increase in accounts payable (\$40,000 – \$30,000)	10,000	
Increase in accounts receivable (\$42,000 – \$21,200)	(20,800)	<u>6,200</u>
Net cash provided by operating activities		41,200
 Cash flows from investing activities		
Proceeds from sale of investments (\$32,000 - \$5,000)	27,000	
Purchase of land	(38,000)	
Net cash used by investing activities		(11,000)
 Cash flows from financing activities		
Issuance of common shares	30,000	
Payment of cash dividends	(10,000)	
Net cash provided by financing activities		<u>20,000</u>
 Net increase in cash		50,200
Cash at beginning of year		<u>20,000</u>
Cash at end of year		<u><u>\$70,200</u></u>

Note: The purchase of land through the issuance of \$30,000 of bonds is a significant non-cash financing transaction that would be disclosed in the notes to the financial statements.

PROBLEM 5-7 (Continued)

- (c) Current ratio and acid test ratios are the same (no inventory):

2014: \$112,200 , \$40,000 = 2.81

2013: \$73,200 , \$30,000 = 2.44

- (d) An analysis of Aero's free cash flow indicates it is negative as shown below:

Free Cash Flow Analysis

Net cash provided by operating activities ...	\$ 41,200
Less: Purchase of land	(38,000)
Dividends.....	<u>(10,000)</u>
Free cash flow.....	<u><u>\$ (6,800)</u></u>

Current cash debt coverage – Net cash provided from operating activities divided by average current liabilities:

Its current cash debt coverage is 1.18 to 1 $\frac{\$41,200}{\$35,000}$. Overall, it appears that its liquidity position is average and overall financial flexibility should be improved.

* $(\$30,000 + \$40,000) \div 2$

PROBLEM 5-7 (Continued)

- (e) Aero has managed to more than triple its cash balance in the year mainly from cash generated from operating activities, which is a good trend. Aero was able to pay large dividends and obtained external financing for its investments in land and also obtained cash by selling off some of its investments. Aero had an alarming increase in its accounts receivable. Unless this increase is justified from increased sales or from a conscious change in credit policies, management should investigate the reasons for this level of increase.**
- (f) This type of information is useful for assessing the amount, timing, and uncertainty of future cash flows. For example, by showing the specific cash inflows and outflows from operating activities, investing activities, and financing activities, the user has a better understanding of the liquidity and financial flexibility of the enterprise. These reports also provide useful information about the flow of enterprise resources, which helps users make more accurate predictions about future cash flows. In addition, some individuals are concerned about the quality of the earnings because the measurement of net income depends on a number of accruals and estimates which may be somewhat subjective. As a result, the higher the ratio of cash provided by operating activities to net income, the more comfort some users have in the reliability of the earnings.**

PROBLEM 5-8

(a) Jia Inc.
Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities		
Net income		\$32,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense	\$12,000	
Gain on sale of investments	(3,400)	
Increase in accounts receivable (\$41,600 – \$21,200)	<u>(20,400)</u>	<u>(11,800)</u>
Net cash provided by operating activities		20,200
Cash flows from investing activities		
Proceeds from sale of investments	19,000	
Purchase of land	<u>(18,000)</u>	
Net cash provided by investing activities		1,000
Cash flows from financing activities		
Issuance of common shares	26,000	
Retirement of notes payable	(17,000)	
Payment of cash dividends	<u>(9,200)</u>	
Net cash used by financing activities		<u>(200)</u>
Net increase in cash		21,000
Cash at beginning of year		<u>20,000</u>
Cash at end of year		<u>\$41,000</u>

Note: The purchase of land through the issuance of \$30,000 of bonds is a significant non-cash financing transaction that would be disclosed in notes accompanying the financial statements.

PROBLEM 5-8 (Continued)

(b)

Jia Inc.
Statement of Financial Position
December 31, 2014

<u>Assets</u>		<u>Liabilities and Shareholders' Equity</u>	
Cash	\$41,000	Accounts payable	\$30,000
Accounts receivable	41,600	Long-term notes payable	24,000 (4)
Investments – FV:NI	16,400 (1)	Bonds payable	30,000 (5)
Equipment (net)	69,000 (2)	Common shares	126,000 (6)
Land	88,000 (3)	Retained earnings	46,000 (7)
	<u>\$256,000</u>		<u>\$256,000</u>

(1) \$32,000 – (\$19,000 – \$3,400)
(2) \$81,000 – \$12,000
(3) \$40,000 + \$18,000 + \$30,000
(4) \$41,000 – \$17,000

(5) \$0 + \$30,000
(6) \$100,000 + \$26,000
(7) \$23,200 + \$32,000 – \$9,200

- (c) The statement of cash flows is useful for assessing the amount, timing, and uncertainty of future cash flows. For example, by showing the specific cash inflows and outflows from operating activities, investing activities, and financing activities, the user has a better understanding of the liquidity and financial flexibility of the enterprise. The statement of cash flows also provides useful information about the flow of enterprise resources, which helps users make more accurate predictions about future cash flows. In addition, some individuals are concerned about the quality of the earnings because the measurement of net income depends on a number of accruals and estimates, which may be somewhat subjective. As a result, the higher the ratio of cash provided by operating activities to net income, the more comfort some users have in the reliability of the earnings. In this problem, the ratio of cash provided by operating activities to net income is 63% (\$20,200 , \$32,000).

PROBLEM 5-8 (Continued)

***(d)**

An analysis of Jia's free cash flow indicates it is negative as shown below:

Free Cash Flow Analysis

Net cash provided by operating activities	\$20,200
Less: Purchase of land	(18,000)
Dividends	<u>(9,200)</u>
Free cash flow	<u><u>\$ (7,000)</u></u>

Its current cash debt coverage is $.67$ to 1 $\frac{\$20,200}{\$30,000}$ and its cash debt coverage ratio is $.26$ to 1 $\frac{\$20,200}{\frac{\$71,000 + \$84,000}{2}}$, which are reasonable. Overall, it appears that its liquidity position is average and overall financial flexibility should be improved.

- (e) Jia has managed to more than double its cash balance in the year from cash generated from operating activities. While obtaining external financing for the majority of its investments, it has also had an alarming increase in its accounts receivable. Unless this increase is justified from increased sales or from a conscious change in credit policies, management should investigate the causes for this level of increase.

PROBLEM 5-9

(a)

**Sargent Corporation
Statement of Financial Position
December 31, 2014**

Assets			
Current assets			
Cash		\$	190,000
FV - NI investments			80,000
Accounts receivable	\$170,000		
Less allowance for doubtful accounts	<u>10,000</u>		160,000
Inventory, at lower of FIFO cost and net realizable value			<u>180,000</u>
Total current assets		\$	610,000
Long-term investments			
FV – OCI investments	155,000		
Bond sinking fund	250,000		
Note receivable from related company due 2020	40,000		
Land held for future use	<u>270,000</u>		715,000
Property, plant, and equipment			
Land	500,000		
Buildings	\$1,040,000		
Less accumulated depreciation—buildings	<u>360,000</u>	680,000	
Equipment	450,000		
Less accumulated depreciation—equipment	<u>180,000</u>	<u>270,000</u>	1,450,000
Intangible assets			
Patents (net of accumulated amortization)	115,000		
Franchise (net of accumulated amortization)	<u>165,000</u>		280,000
Goodwill			<u>100,000</u>
Total assets			<u><u>\$3,155,000</u></u>

PROBLEM 5-9 (Continued)

Liabilities and Shareholders' Equity

Current liabilities

Accounts payable				\$ 140,000
Notes payable				80,000
Bank overdraft				40,000
Income tax payable				40,000
Unearned revenue				<u>5,000</u>
Total current liabilities				305,000

Long-term liabilities

Notes payable			\$ 120,000	
7% bonds payable, due 2022	\$1,000,000			
Less discount on bonds payable	<u>40,000</u>	<u>960,000</u>		<u>1,080,000</u>
Total liabilities				1,385,000

Shareholders' equity

Capital shares				
Preferred shares; 200,000 shares authorized, 70,000 issued	450,000			
Common shares; 400,000 shares authorized, 100,000 issued	<u>1,000,000</u>	1,450,000		
Retained earnings		290,000		
Accumulated other comprehensive income		<u>30,000</u>		
Total shareholders' equity				<u>1,770,000</u>
Total liabilities and shareholders' equity				<u>\$3,155,000</u>

- (b) The main purposes of the statement of financial position are to provide information about the assets, liabilities and shareholders' equity, to allow the reader to assess how well the business is using its assets to earn a return, and to evaluate the business' capital structure. The details are intended to provide all of the necessary information to assess business risk and future cash flows, and are lost in the condensed presentation, especially if items are offset. It would be difficult with the condensed format to analyze the company's liquidity, solvency and financial flexibility. The final goal is to analyze profitability and return on investment, when relating the income statement to the level of investment outlined in the statement of financial position.

PROBLEM 5-10

Criticisms of the statement of financial position of the Rodges Corporation:

- 1. An allowance for doubtful accounts receivable is not indicated, and there is no indication that the amount presented is “net”.**
- 2. The basis for the valuation and the method of pricing of inventory are not indicated, and it is not indicated that inventory is reported at the lower of cost and net realizable value, as required by IFRS.**
- 3. An investment in a subsidiary company is not an investment ordinarily held to be sold within one year or the operating cycle. As such, this account should not be classified as a current asset, but rather should be included under the heading “Long-term investments”. If this is an investment in the common shares of the subsidiary (as opposed to an advance) it would be eliminated in consolidation, as all subsidiaries are consolidated under IFRS.**
- 4. Investments in shares listed under investments should be described as to the measurement model used to account for these investments, for instance, “Fair Value through Net Income” or “Fair Value through OCI” depending on the nature of the investments and accounting policy choice.**
- 5. Buildings and land should be segregated. The term “reserve: should be replaced by “accumulated” and the accumulated depreciation should be shown as a subtraction from the Buildings account only.**
- 6. Investment in bonds to be held to maturity would be more appropriately shown under the heading of "Investments"**

PROBLEM 5-10 (Continued)

and should be shown at “amortized cost” provided that the bonds are managed on a contractual yield basis.

- 7. Reserve for Income Taxes should be entitled Income Tax Payable.**
- 8. Customers' Accounts with Credit Balances is an immaterial amount. As such, this account need not be shown separately. The \$1 credit could readily be netted against Accounts receivable, or grouped with Accounts payable without any material misstatement.**
- 9. Unamortized Premium on Bonds Payable should be shown as an addition to the related Bonds Payable in the long-term liabilities section, or the Bonds Payable could be reported at \$62,000, at amortized cost. The use of the term deferred credits is inappropriate.**
- 10. Bonds Payable are inadequately disclosed. The interest rate, interest payment dates, and maturity date should be indicated.**
- 11. Additional disclosure relative to the Common Shares account is needed. This disclosure should include the number of shares authorized and issued.**
- 12. Earned Surplus should be entitled Retained Earnings.**
- 13. Cash Dividends Declared should be disclosed on the statement of retained earnings as a reduction of retained earnings. Dividends Payable, in the amount of \$8,000, should be shown on the statement of financial position among the current liabilities, assuming payment has not occurred.**
- 14. The heading “Liabilities and Equity” should be changed to “Liabilities and Shareholders' Equity”.**

PROBLEM 5-10 (Continued)

- 15. Grand totals should have captions for “Total assets” and “Total Liabilities and Shareholders’ Equity”.**
- 16. Shareholders’ equity may need to show “Accumulated Other Comprehensive Income” since the company has investments and would have unrealized gains and losses to disclose if they are using the Fair Value through OCI model and following IFRS.**

PROBLEM 5-11

(a)

**Spencer Corporation
Statement of Cash Flows
For the Year Ended December 31, 2014**

Cash flows from operating activities		
Net income		\$19,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense (Note 1)	\$43,000	
Loss on sale of equipment (Note 2)	7,000	
Gain on sale of land (Note 3)	(9,000)	
Impairment loss-Goodwill (Note 5)	49,000	
Increase in accounts receivable	(28,000)	
Increase in inventory	(52,000)	
Decrease in accounts payable	<u>(39,000)</u>	<u>(29,000)</u>
Net cash used by operating activities		(10,000)
Cash flows from investing activities		
Purchase of Fair Value-OCI investments	(15,000)	
Proceeds from sale of equipment	21,000	
Purchase of land (Note 4)	(48,000)	
Proceeds from sale of land	<u>95,000</u>	
Net cash provided by investing activities		53,000
Cash flows used by financing activities		
Payment of cash dividends	(32,000)	
Issuance of notes payable	<u>25,000</u>	
Net cash used by financing activities		<u>(7,000)</u>
Net increase in cash		36,000
Cash at beginning of year		<u>29,000</u>
Cash at end of year		<u>\$65,000</u>

Note: During the year, Spencer retired \$140,000 in notes payable by issuing common shares.

PROBLEM 5-11 (Continued)

Note 1: Solve for X, where $\$86,000 - \$12,000 + X = \$117,000$

Note 2: $\$21,000 - (\$40,000 - \$12,000)$

Note 3: $\$95,000 - \$86,000$

Note 4: Solve for X, where $\$103,000 + X - \$86,000 = \$65,000$

Note 5: $\$173,000 - \$124,000$

- (b) Net cash provided by investing activities funded net cash used by operating activities and financing activities. Negative cash from operating activities may signal that there are weaknesses in Spencer's core operations, including profitability of operations and management of current assets such as accounts receivable and inventory (both accounts receivable and inventory increased over the year). As well, Spencer may not be taking advantage of normal credit terms offered by its suppliers, resulting in a significant decrease in accounts payable over the year. Proceeds from sale of long-term assets such as equipment and land are being used to fund operating and financing activities, which may be cause for concern if the assets sold were used to generate significant revenue. Shareholders did benefit from the cash dividend received two years in a row. However, it should be noted that the dividend declared in 2014 (\$15,000) was high compared to net income generated in the year (\$19,000). Spencer may not be able to sustain payment of cash dividends in the long-term if its profitability does not improve going forward.**

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text. Note that the first few chapters of the text lay the foundation for financial reporting decision-making. Therefore the cases in the first few chapters (1-5) are shorter with less depth. As such, they may not cover all aspects of a full-blown case analysis.

CA5-1 CIBC

Note that the financial reporting of the bank is governed not only by GAAP (IFRS) but also by the Bank Act. The discussion below is meant to reflect a conceptual analysis only.

Overview

CIBC is in a precarious position with respect to its past dealings with Enron. Not only is it still owed money by Enron but having just settled with the securities commissions, it has many outstanding (and likely additional potential) lawsuits. Users will include potential and existing plaintiffs, who will use the financial statements to determine whether the bank can afford to settle the lawsuit if they lose. The statements may also be used in the court cases to see if the bank profited unduly through its alleged unscrupulous dealings with Enron. This situation presents additional risks for the audit and therefore, as the bank's auditors, you would want to be more conservative with full disclosures.

Being a public Canadian bank, IFRS is a constraint.

Analysis and Recommendations

Issue: How to present the \$80 million fine in the 2003 statements

CA5-1 CIBC (Continued)

Unusual item - loss	Expense
- The magnitude of this loss is such that it should be separately disclosed. It is the largest such settlement of its kind in Canada. - The loss is atypical and infrequent, since CIBC and other Canadian banks are fairly conservative and normally are not subject to these types of regulatory investigations. - Management might want to highlight this loss as being beyond their control. - Perhaps the loss could be presented as part of the discontinued operations. The structured financing operations, if considered a separate component with separate business operations and f/s, might qualify and the lawsuit loss may be seen to be part and parcel of the discontinued operations. - Other.	- The loss may not be seen as unusual since it may be argued that it was a result of a management decision. Management chose to be involved in the more aggressive structured financing business. Therefore, this was an ordinary cost of doing business. - The fact that the regulatory authorities won their case may lead to the conclusion that the bank was complicit somehow in the Enron deception (i.e., should CIBC and other banks that participated in advising Enron have known how Enron was accounting for these transactions and why? This is difficult to answer.) - Other.

In conclusion, the amount should be shown separately so that the users may see the impact of the Enron settlements. Perhaps it could be shown as part of the discontinued operations. It does reflect a cost of operating the structured financing group, and given that the bank will no longer be operating in that line of business, this type of cost should not be recurring.

Issue: Valuation of the Enron receivables in 2003 statements

CA5-1 CIBC (Continued)

Write down/off	Leave as is
- Enron is bankrupt - Many people are suing Enron and therefore the likelihood of being able to collect the receivables is remote. - Gives a better picture of the harm done to CIBC by Enron. - Other.	- Bank has already likely assessed the collectibility and must feel that the amounts are recoverable through the bankruptcy proceedings. - Other.

In conclusion, as the auditor, you might feel that it is more conservative to write off the Enron receivables.

The issue of how to account for the additional potential lawsuits may also be of concern. Lawsuits which are likely to result in losses that are measurable should be accrued. The bank should consult its lawyers in this regard. The auditor should ensure that the situation is at least appropriately disclosed in the notes for predictive purposes.

Potential additional tax liability in 2009 statements

Recognize liability for additional potential taxes	Do not recognize liability
- CIBC has taken the amount of the settlement as a tax deduction. CRA has challenged this. - This is a contingent liability i.e. the bank may have a potential liability if the CRA disallows the deduction. - Under pre 2011 Canadian GAAP would accrue if the payout is likely or probable and measurable. - The amount is measurable (being the deductible amount times the tax rate). - Other.	- At this point, it is unclear as to whether a liability exists or not. - If the amount is accrued, it may prejudice the case with CRA. - Other.

In conclusion, it is difficult to say how this should be treated. The bank would have to determine whether, in their best judgement and in conjunction with their lawyers/tax accountants, a liability exists. The auditors would rely on the evidence and expertise of the lawyers/tax accountants.

CA5-2 HASTINGS INC.

Overview

This is a private company and the company currently follows ASPE. However, because the company may go public in the next 5 – 10 years, it may be a good idea to consider whether to move to IFRS now to avoid switching costs later. The company would want to examine the impact of following IFRS versus ASPE.

Due to the losses in the past three years, there may be some potential for bias.

As the company's auditors, you should be aware of the impact of switching to IFRS.

NB – although the company would do a thorough review of all potential differences, in this case, we have limited information given and so will focus on the information presented in the case i.e. the property, plant and equipment.

Analysis and Recommendations

Issue: How to treat the company's revenue producing assets

ASPE	IFRS
- Assets would be carried at cost or amortized cost - This is consistent with the way that they have been treated in past – so no costs required to restate. - Other.	- Allows an accounting policy choice to either account at cost/amortized cost or fair value. - Fair value would better represent reality. - Using the revaluation method, the increase in value would be booked through other comprehensive income. - Going forward, would have to ensure the value represents fair value. - Introduces volatility into comprehensive income. - Costly to continue to revalue. - Most relevant information about economic value – useful to users. - Other.

In conclusion, either following ASPE or IFRS are both options although switching over to IFRS right now would involve additional costs. The company would want to examine other differences between ASPE and IFRS before making a decision as to which one to follow.

IC5-1 FRANKLIN DRUGS

Overview

Public company and therefore must follow IFRS.

Revenues and net income are down this year due to competition and this might motivate the company to try to make the numbers look better. This is especially an issue since the company's share price has declined in reaction to the uncertainty. In addition, management remuneration is tied to the share price – adding further risk of bias.

Overall, as audit senior, you would be careful regarding the potential for bias; therefore, conservative financial reporting would be the safest as long as the resulting statements faithfully represent the results of operations and financial position of the company.

Analysis and Recommendations

Value of deferred costs related to FD1 and FD2

Leave as is	Write down/impaired
- Legally, the patent is still in place and the company is still able to sell the drugs exclusively and thus recover the costs. - FDL has launched a lawsuit to protect the value and earnings potential of the drugs. - The legal costs should be expensed as they are just maintaining the life of the asset (hopefully) and not prolonging it. - In this business, the cost of protecting patented drugs would be a normal cost of doing business and hence the legal costs would be expensed. - Other.	- Competitors are selling generic versions of the drugs at lower prices which will undercut the market for FDL's drugs. - Generic drug companies are able to sell for lower prices since they do not have the expensive research and development costs. This may result in FDL not being able to recover the development costs. - Revenues are already declining. - The lawsuits generally take several years and by that time the patents will have expired. - Other.

In conclusion, the value of the asset appears to be impaired. Estimates of the recoverable value of the patents need to be made in determining the amount of the impairment loss.

IC5-1 (Continued)

Deferred Costs regarding FD3

Leave development costs as is	Write down/off
- FDL feels that it can hold its market share based on the past success of the drug. Just because a generic drug comes out, it does not mean that all demand for the brand name drug will dry up. - May be able to maintain sales, but at a lower price – so development costs will still be recoverable. - Sales have only declined 3% to date; therefore, demand still remains strong. - Other.	- Increased competition may result in asset being impaired. - Customers may not be aware of the generic drugs, as they are new to the market. Thus sales may decrease to a greater extent in the future. - Other.

In conclusion, it is safer to write down the development costs so that assets are not overstated.

Volume rebates – how to measure

As in past	Estimate fewer/lower rebates
- This would be consistent. - As noted above, demand for the brand name drug will not necessarily dry up, just because generic drugs are introduced. - Other.	- Customers are new, so it is difficult to determine – basing it on past transactions may not be relevant. - Given the changing environment and the increase in competition, sales may be lower; therefore, it might make sense to assume a lower percentage. - Other.

In conclusion – estimate lower percentage given the increased competition and the uncertainty given the fact that the customers are new.

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 5-1 (Time 40-50 minutes)

Purpose—to present a cash flow statement that must be analyzed to explain differences in cash flow and net income, and sources and uses of cash flow and ways to improve cash flow.

WA 5-2 (Time 10-15 minutes)

Purpose—to provide the student with an ethics case involving the financial statement disclosure requirements for property plant and equipment.

WA 5-3 (Time 30 minutes)

Purpose—to provide the student with a critical review of balance sheet presentation of a real estate company.

WA 5-4 (Time 10-15 minutes)

Purpose—to provide the student with three independent situations where an assessment of the unconditional and/or conditions obligations must be assessed.

WA 5-5 (Time 20 minutes)

Purpose—to provide the student with the opportunity to compare IFRS and accounting standards for private enterprises.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 5-1

Date

James Spencer, III, CEO
Spencer Corporation
125 Bay Street, Suite 506
Toronto, ON

Dear Mr. Spencer:

I have good news and bad news about the financial statements for the year ended December 31, 2014. The good news is that net income of \$100,000 is close to what we predicted in the strategic plan last year, indicating strong performance this year. The bad news is that the cash balance is seriously low. Enclosed is the Statement of Cash Flows which best illustrates how both of these situations occurred at the same time.

If you look at the operating activities, you can see that all of the cash generated by operations was used to increase inventory and to substantially reduce the accounts payable. Compounding this problem was the fact that billings on account exceeded collections. While these are necessary activities, they reduced your cash balance by \$116,000. Two activities, which are incompatible with each other, are the increases in inventory with the decreases in accounts payable. You might want to check into any changes in your business practices that have caused this unlikely combination.

The corporation made significant investments in equipment and land. These were paid from cash reserves. While it is good that no monies were borrowed against these assets, these purchases used 75% of the company's cash. In addition, the redemption of the bonds improved the equity of the corporation and reduced interest expense. However, it also used 25% of the corporation's cash. It is normal to use cash for investing and financing activities. But when cash is used, it must also be replenished, and acquisition of plant assets is normally financed using equity or long term debt financing, not through the depletion of cash on hand. The duration of the assets productive lives should be matched with the duration of the debt.

WA 5-1 (Continued)

Operations normally provide the cash for investing and financing activities. Since there is a finite amount of assets to sell and funds to borrow or raise from the sale of capital shares, operating activities are the only renewable source of cash. That is why it is important to keep the operating cash flows positive. Cash management requires careful and continuous planning.

There are several possible remedies for the current cash problem. First, prepare a detailed analysis of monthly cash requirements for the next year. Second, investigate the changes in accounts receivable and inventory and work to return them to more normal levels. Third, look for more favourable terms with suppliers to allow the accounts payable to increase without loss of discounts or other costs. Finally, if the land was purchased outright for a \$200,000 total cost, consider shopping for a low interest loan to finance the acquisition for a few years and return the cash balance to a more normal level.

If you have additional questions or need one of our staff to address this problem, please contact me at your convenience.

Sincerely yours,

Partner in Charge

WA 5-2

The ethical issues involved are integrity and honesty in financial reporting, full disclosure, and an accountant's professionalism.

Presenting property, plant, and equipment net of depreciation on the face of the statement of financial position is perfectly acceptable under both IFRS and ASPE. However, under both sets of GAAP, the details must be provided by other disclosures. It is inappropriate to attempt to hide information from financial statement users. Information must be relevant and useful, and the presentation the ethical accountant is considering would not be if there were no further note disclosure, as it would not assist the user in predicting future cash flows. Users would not grasp the age of capital assets and the company's need to concentrate its future cash outflows on replacement of these assets. The historical cost, accumulated depreciation and book value of each major category of asset should be presented in a schedule in the financial statement notes, cross referenced to a total appearing on the face of the balance sheet.

WA5-3 Brookfield

Classified	Unclassified
- A classified balance sheet assists users in assessing liquidity of the company. It separates current and noncurrent assets and liabilities - Most companies present a classified balance sheet and thus a classified balance sheet promotes comparability - In 2011, we note that Brookfield discloses its non-current assets before current assets, as well as its non-current liabilities before current liabilities. It continues to sort by size, as the focus is on the largest assets.	- A real estate company that is in the development business has a long operating cycle and therefore a classified balance sheet is not so informative and is more difficult to prepare. - In 2008, the company appears to present its assets in terms of declining financial size. The liabilities that are used to finance the assets are presented in tandem order with the related assets. This allows users to see which assets are financed by debt and by how much. By looking at the notes, users may look at the due dates of the loans and compare to the related assets to assess liquidity - Sorting by size is logical as the emphasis is on the largest assets (the properties in this case since the business is capital intensive) - This presentation portrays the desired image since the properties are given priority in presentation and as long as they are properly valued, the company appears to have good solid value (the other assets are almost incidental). Note that there is a reasonable margin of \$3.4 billion excess historical value of commercial property value (\$14,901 million) over related commercial property loans (\$11,505 million). The debt to equity ratio is about 4.7 to 1 (\$16,030 to \$3,427) – although high, not unrealistic in this industry.

WA5-3 Brookfield (Continued)

Conclusion: By having an alternative presentation in 2008, the company is able to emphasize the specific and unique nature of this industry. This is common practice in this industry and therefore, comparability was enhanced. The transition to IFRS has encouraged the use of classified presentation and Brookfield has done so, while maintaining a presentation form that emphasizes the capital intensive nature of the business.

WA 5-4 Unconditional and Conditional Obligations

- (a) It is not clear whether a present obligation exists. On the one hand, legal proceedings have commenced and a past event has occurred. Food for Thought must be ready to perform as the court decides and therefore it may be argued that it has an obligation to abide by the law (as does any citizen in any law abiding society). On the other hand, the entity did not know that it had sold harmful food, and it still argues that the food it sold was not the cause of the illness. Therefore the company might argue that no present obligation exists. If it is decided that a liability exists, it would have to be recorded and included in the December 31 financial statements. Even if the restaurant is subsequently found not to be at fault, there will still be costs required to defend the lawsuit and there is still the risk of an adverse outcome. Provisions are not required for loss contingencies for items like lawsuits where it is more likely than not that no obligation exists at the date of the financial statements. These are “possible obligations” whose existence will only be confirmed by uncertain future events. Overall, it appears that no liability would be recorded under IFRS for this loss contingency.
- (b) In Country A, since legislation has now been passed and includes requirement to clean up both the past and any future contamination, a past event has occurred with the passing of the new legislation. Encor has now a present obligation to clean up the sites in Country A. In Country B, there is no past event for the passing of legislation. There is currently no obligation (either present or contingent) to clean up the sites in Country B. However, as this is an item under consideration in Country B, a carefully worded note may be helpful to the users of the financial statements.

WA 5-4 (Continued)

- (c) In this scenario, there are two different issues. The first is with respect to the three year warranty that is publicized by the company. The company has an unconditional obligation to provide warranty service for the three year period, as a result of the sale. It must stand ready to honour these warranty claims. It will also have a conditional obligation that will arise as defective parts are returned and the amount of the actual warranty becomes known. In contrast, the fact that the company has replaced defective parts, at its discretion, beyond the three year period for “special customers” does not necessarily give rise to an obligation. If this is not the company’s general practice and the customer could not reasonably rely on this past practice for a warranty to apply to the purchase of all goods, then, for the fourth year, there is no unconditional or conditional obligation that has arisen at the time of the sale. However, if this past practice indicates that the company acknowledges an expectation that it will complete warranty repairs for free in the 4th year after sale then a “Constructive Obligation” exists and it should be estimated and recorded under IFRS.

WA5-5 IFRS / PE GAAP

Generally, ASPE has been designed to reduce complexity in the recognition and measurement of items, to reduce disclosure requirements and to make the information useful for the main user, who has been defined as creditors. Given this, we will see the impact of this in the discussion below of the differences between ASPE and IFRS.

Generally, the statement of financial position under IFRS and ASPE are fairly consistent. Under ASPE, there are differences in the specific items that are to be displayed on the face of the statement of financial position. These differences arise due to a requirement to reduce note disclosure under ASPE and to different accounting recognition and measurement standards with IFRS. For example, ASPE requires the following items to be separately disclosed on the face of the statement: government assistance receivable, prepaid expenses, investments (separately identifying those at cost, equity method, or fair value), future income tax assets or liabilities (which may be current or long term), capital lease obligations, and asset retirement obligations. The reason that more specific items are required on the ASPE statement is to try to reduce note disclosure. Secondly, given the various methods for reporting investments, this allows users to understand quickly from a review of the financial statements, how the various investments have been accounted for. IFRS on the other hand, has separate accounting standards for measuring and recognizing investment properties and biological assets and therefore requires separate disclosure of these assets on the statement. ASPE does not have these specialized standards.

Another reason for differences between ASPE and IFRS may be due to ASPE staying with past conventional treatment of certain items in Canada, rather than adopting the global IFRS convention. Four examples of differences arising from these conventions are:

WA5-5 (Continued)

- a. The treatment of long term debt coming due in the next 12 months, either due to a breach of a covenant or as required by a repayment schedule. Under ASPE, if the debt is refinanced by the issue date of the report, then this debt amount may be shown as non-current. In contrast, in order for the debt to be shown as non-current, IFRS requires the company to have an unconditional right to defer at the report date, which is indicated by a refinancing agreement in place prior to the report date. The difference in ASPE and IFRS is likely due to staying with the prior Canadian treatment under ASPE.
- b. Exclusion of all equity investments from cash equivalents under ASPE. Under IFRS, preferred shares with a mandatory redemption within 3 months of purchase may be included in cash equivalents. This is not allowed under ASPE.
- c. Date that the financial statements were authorized for issue is not required under ASPE, but is under IFRS.

Cash flow per share is not allowed under ASPE, whereas IFRS does not prohibit this disclosure.

RESEARCH AND FINANCIAL ANALYSIS

RA5-1

- (a) Shoppers Drug Mart Corporation adopted the classified statement of financial position in report format (where the liabilities and shareholders' equity are listed directly below the assets). This format is referred to as the report format. Another format is the account format with the assets on the left side and the liabilities and shareholder's equity sections on the right side. Further, it could have provided a non-classified statement of financial position, which does not segregate assets and liabilities as current and non-current. This type of statement of financial position would not allow users to readily assess liquidity and solvency of the Company.
- (b) Shoppers Drug Mart Corporation uses note disclosure to provide additional financial information that is pertinent to the users of the Financial Statements. Other acceptable methods of disclosing the additional financial information are: parenthetical explanations (which follow the item), the use of cross-referencing two related items, or providing supporting schedules (for example, a property, plant and equipment schedule as given in note 15 to the financial statements).
- (c) Shoppers Drug Mart Corporation uses the Indirect Method for its Statement of Cash Flows. In 2011, it had (in thousands of Canadian dollars) cash flows from operations of \$973,838, cash flows used in investing of \$349,172 and cash flows used in financing of \$570,454 with an overall net increase in cash of \$54,212. Cash provided by operating activities has an increasing trend with cash flow from operating activities increasing by approximately 17.6%.

Cash generated from operations is significantly different from net earnings due to non-cash items such as depreciation and amortization and deferred taxes. For Shoppers Drug Mart, which has a large base of capital assets, depreciation and amortization are large annual non-cash expenses. Also, being a large organization, deferred taxes can amount to a sizable adjustment as well.

RA5-1 (Continued)

(d)

1. Net Cash Provided by Operating Activities , Average Current Liabilities = Current Cash Debt Ratio

$$\$973,838 \div \frac{\$1,776,238 + \$1,527,567}{2} = 0.590:1$$

2. Net Cash Provided by Operating Activities , Average Total Liabilities = Cash Debt Coverage Ratio

$$\$973,838 , \frac{\$3,032,480 + \$2,941,562}{2} = 0.326:1$$

3. Net Cash Provided by Operating Activities less capital expenditures and dividends = Free Cash Flow (all figures in Canadian thousands) for December 31, 2011

Net cash provided by operating activities	\$973,838
Less: Capital expenditures (\$53,836 + \$341,868)	<u>(395,704)</u>
Free cash flow	<u><u>\$578,134</u></u>

It can be argued that Shoppers Drug Mart's financial liquidity is on the weaker side as can be seen through its Current Cash Debt Ratio and Cash Debt Coverage Ratio. Although the Company has positive cash flow from operations, current and long-term debt obligations are significantly larger than the cash that is generated. However, we see that the financial flexibility is good with a positive free cash flow of \$578,134. The Company has a fair amount of discretionary cash, which corresponds with its maturity phase.

RA5-2—BOMBARDIER INC.

- (a) The company has used a classified presentation. In Note 36 of the financial statements, Bombardier discloses that a classified statement of financial position has been presented under IFRS. This is consistent with IFRS, which states that entities must use classified presentation unless liquidity presentation offers more relevant and reliable information.
- (b) The following are the ratios for Bombardier for the fiscal years ending December 31, 2011 and January 1, 2011. (Note: All figures in millions of U.S. dollars, except for per share amounts).

The current ratio, acid test and current cash debt coverage ratio cannot be calculated since the company does not provide subtotals for current assets and current liabilities. Note, for the ratios below, where an “average” was required, the actual year end amount was used for January 1, 2011 as the comparable information was not available due to restating of the amounts with the introduction of IFRS.

	December 31, 2011		January 1, 2011	
Receivables turnover	18,347	13.17	17,892	14.21
	1,393		1,259	
Inventory turnover	14,381*	2.10	13,606*	2.00
	7,353		7,469	
Asset turnover	18,347	0.77	17,892	0.77
	23,978		23,106	
Profit margin	837	4.6%	775	4.3%
	18,347		17,892	
Return on assets	837	3.49%	775	3.35%
	23,978		23,106	

RA5-2 (Continued)

	<u>December 31, 2011</u>		<u>January 1, 2011</u>	
Return on equity	837	79.6%	775	65.5%
	1052		1,183	
Earnings per share				
Basic	0.47		0.43	
Diluted	0.47		0.42	
Payout ratio	179	21.4%	173	22.3%
	837		775	
Debt to total assets	23,193	97.2%	22,571	93.7%
	23,864		24,092	
Times interest earned	1,202	1.77	1,205	1.76
	681		684	
Cash debt	243	0.011	1,692	0.077
coverage ratio	22,882		21,866	
Current ratio	13,263	1.11	14,232	1.12
	11,955		12,704	
Acid-test ratio	4,780	0.40	5,572	0.44
	11,955		12,704	
Current cash debt				
coverage ratio	243	0.02	1,692	0.14
	12,330		12,184	

* The amount of inventories recognized in cost of sales is disclosed in note 15.

RA5-2 (Continued)

- (c) Liquidity has declined from 2010, as can be seen through the slightly lower Current and Acid-test ratios. Notably, the cash generated from operating activities has declined as well. The customer collection period has increased, but inventory turnover has improved. Profit margin and return on assets have improved marginally, with return on equity increasing further. The amount of debt in the company is incredibly high, representing more than 90% of assets in both 2010 and 2011. Alarming, the cash debt coverage ratio has declined further to just over 1%. This decline in cash from operating activities was primarily caused by increases in non-cash assets and decreases in current liabilities.
- (d) The following is a table extracted from the comparative statement of cash flows of Bombardier (in millions of US dollars).

	<u>December</u> <u>31,2011</u>	<u>January 1,</u> <u>2011</u>
Cash from operating activities	\$243	\$1,692
Cash from investing activities	(798)	(1,225)
Cash from financing activities	(227)	254
Effect of exchange rate changes	<u>(41)</u>	<u>102</u>
Net change in cash	<u>\$(823)</u>	<u>\$823</u>

The Company has experienced positive cash flows from operations, although these have decreased over the two years. The use of cash and cash equivalents is primarily from Bombardier's investments in working capital, capital assets, dividends and debt repayments.

RA5-2 (Continued)

(e)

	31-Dec-11		01-Jan-11	
Cash and cash equivalents	3,372	14.13%	4,195	17.41%
Trade and other receivables	1,408	5.90%	1,377	5.72%
Inventories	7,398	31.00%	7,307	30.33%
Other financial assets	526	2.20%	705	2.93%
Other assets	559	2.34%	648	2.69%
Current assets	13,263	55.58%	14,232	59.07%
Invested collateral	-	-	676	2.81%
PP&E	1,864	7.81%	1,878	7.80%
Aerospace program tooling	3,168	13.28%	2,088	8.67%
Goodwill	2,253	9.44%	2,358	9.79%
Deferred income taxes	1,506	6.31%	1,294	5.37%
Other financial assets	1,305	5.47%	1,104	4.58%
Other assets	505	2.12%	462	1.92%
Non-current assets	10,601	44.42%	9,860	40.93%
	\$23,864	100.00%	\$24,092	100.00%

Bombardier's mix of assets corresponds to that which is expected for a company in manufacturing. The inventories represent the highest investment in assets of 31%, which has increased slightly from the previous year, driven by new customer orders. It has a relatively high amount of cash on hand, representing 14.13% of the total assets. A large portion of assets are also comprised of the Aerospace program tooling, an intangible asset. This signifies the importance of the Aerospace sector of Bombardier's business.

RA5-3 MAPLE LEAF FOODS INC.

- (a) The following are the ratios for Maple Leaf Foods Inc. for the fiscal years ending December 31, 2011 and 2010. (Note: All figures in thousands of Canadian dollars.)

	<u>2011</u>		<u>2010</u>	
Current ratio	<u>\$643,022</u> \$588,745	1.09	<u>\$583,557</u> \$1,091,960	0.53
Quick or Acid Test ratio	<u>\$232,049</u> \$840,353	0.28	<u>\$217,751</u> \$999,475	0.22
Current cash debt coverage ratio	<u>\$244,834</u> \$840,353	0.29	<u>\$285,180</u> \$999,475	0.29
Debt to total assets	<u>\$2,010,346</u> \$2,940,459	68%	<u>\$1,848,138</u> \$2,834,910	65%
Times interest earned	<u>\$182,547</u> \$70,747	2.58	<u>\$119,564</u> \$64,874	1.84
Cash debt coverage ratio	<u>\$244,834</u> \$1,929,242	0.13	<u>\$285,180</u> \$1,970,687	0.14
	<u>\$865,074</u>		<u>\$923,882</u>	
Book value per share	139,517	\$ 6.20	139,247	\$6.63

RA5-3 (Continued)

- (b) The current ratios and quick ratios have improved over the year, generally due to lower current liabilities in 2011. The lower current liabilities are due to the payment of current portions of long-term debt. The solvency ratios have stayed consistent between the years. The times interest earned coverage is greater than two, indicating that the net income is more than enough to cover the interest expense. The low cash debt coverage ratios indicate that this company has very low financial flexibility. This means that the company may have difficulty meeting its long term obligations as they come due without liquidating assets employed in operations.
- (c) The following is a table extracted from the comparative statement of cash flows of Maple Leaf Foods Inc.

	<u>2011</u>	<u>2010</u>
Cash from operating activities	\$244,834	\$285,180
Cash used in financing activities	(55,979)	(164,490)
Cash from investing activities	<u>(209,401)</u>	<u>(161,617)</u>
Net change in cash	<u><u>\$(20,546)</u></u>	<u><u>\$(40,927)</u></u>

We can see from the table above that the company is using cash generated from operations to cover financing and investing activities. We note from the cash flow statement that the company is paying out dividends and carrying out share repurchases. It also paid off a significant portion of long-term debt in the prior year. As for investing activities, the bulk of expenditures are related to additions of long-term assets. These financing and investing activities indicate a focus on providing investors a return on their investment, while reinvesting into long-term assets. The alarming part of the table above is that the decreases in cash each year have resulted in bank indebtedness.

- (d) The working capital position has significantly improved from 2010 to 2011. Current assets increased by 10.27% versus current liabilities which decreased by 46.1%, resulting in an increase in net working capital of 110.7%. This indicates a significant improvement in the company's overall liquidity which is a measure of short-term financial health. The change is primarily due to payment of a debt obligation, which resulted in a decrease in current liabilities.

	2011	2010	%Change
Current Assets	\$643,022	583,557	10.2%
Current Liabilities	588,745	1,091,960	-46.1%
Working Capital	\$54,277	-\$508,403	n/a

RA5-4 GOLDCORP INC.

- a) The major change in Goldcorp's business from 2000 to 2001 was that one of the company's highest yield, lowest cost gold mines, Red Lake Mine, reopened after a major strike had shut down operations. Fiscal year 2001 was the first full year of operations after re-opening of this mine and this had a significant positive impact on the company's operating results and financial position.
- b) The shut-down and subsequent reopening of Red Lake Mine had a significant impact on key financial ratios as shown below.

(in thousands of US dollars)	2001	Dollar change	Percent change	2000
Revenue	165,699	104,393	170%	61,306
Operating earnings	78,791	76,709	3684%	2,082
Operating earnings to revenue	48%			3%
Current Assets	104,412	66,251	174%	38,161
Current Liabilities	15,825	(3,094)	-16%	18,919
Current Ratio	6.6			2.0
Earnings (loss)	52,820	72,146	373%	(19,326)
Shareholders' equity	157,552	31,004	24%	126,548
Return on shareholders' equity	33.53%			(15.27)%

RA5-4 (Continued)

(b) (Continued)

In spite of lower gold prices in 2001 than in the previous two years, gold revenue increased significantly in 2001 due to the high volume of production at Red Lake Mine. Because the cost per ounce of producing gold from Red Lake Mine is significantly lower compared to the other mines, operating and net earnings also improved substantially from 2000 to 2001. The high rate of production at Red Lake Mine also resulted in higher cash, short term investments and inventory figures for 2001 than 2000 resulting in a substantial improvement in the company's working capital and current ratio. Return on shareholders' equity improved dramatically as well.

- (c) Now in 2011, Goldcorp is a very different company. It now owns 15 mining sites, as compared to only 2 in 2001. The cash cost to produce an ounce of gold is significantly higher at \$534 versus \$85. However, in 2011, the average gold price was \$1,572 versus only \$271 in 2001. So the industry and the company are very different. As the gold selling price increases, the company can afford to operate mines that have higher costs to operate and extract the gold. It is likely that these newer mines are not as low cost producers as the Red Lake Mine was and this is evident in the operating margins being only 42% in 2011 as compared to 48% in 2001.

The current ratio of 3.83 (as compared to 6.1) is now more in line with expectations as the company continues to invest in new mining operations and exploration rather than having significant amounts of cash on hand. However, the current ratio is higher than prior years, likely due to the instability in the market over the last year. Finally, the return on shareholder's equity is much lower than in 2001, because the company has issued more than \$16 billion in common shares, which has been used to invest in many more mining sites. This return is also lower, since not all the mining sites are fully operational.

RA5-5 QUEBECOR VERSUS THOMSON REUTERS

- (a) Quebecor Inc. is a global company operating in many sectors including: publishing and distribution of newspapers, magazines and directories; cable distribution, wireless and internet services; broadcasting; and retailing of books, magazines and videos over the internet. Thomson Reuters Corporation provides electronic information and solutions to business and professional customers around the world. As can be seen, Quebecor is in many different sectors of the industry, making one to one comparison very difficult. This fact holds true for the entire industry, where each peer company is in many different sectors of the print industry. Thomson Reuters is the largest, by asset size and revenues, and in some comparable business lines, so it would be as good as any other company in the industry to use as a benchmark. However, it is more useful to use an average of several companies within an industry to provide a better benchmark for comparison since this is more representative of the industry than any single company.
- (b) Three other companies that might be used for comparison purposes are GVIC Communications Corp., Astral Media and Torstar Corporation.

(c)

(in millions of dollars)	Thomson 2011	Quebecor 2011	GVIC 2011	Astral 2011	Torstar 2011
Current assets	3,659	\$1,126.1	\$67.37	\$336.92	\$415.47
Current liabilities	5,011	1,171	72.52	243.44	454.42
Current ratio	0.73	0.96	0.93	1.38	0.91
Total liabilities	16,209	5,964.4	265.41	1,138.51	778.5
Total assets	35,531	8,616.1	584.71	2,477.55	1,484.77
Debt to total assets ratio	.46	.69	.45	.46	.52

The average of these five competitors is: the current ratio is 0.982 and the debt to asset ratio is 0.52. However, in looking at the five competitors, there is a very wide range in these ratios, and given the different business lines that each company is in, an industry average may not be very helpful in the analysis.

RA5-5 (Continued)

- (d) Based on this very brief analysis, in terms of liquidity, Quebecor is doing significantly better than Thomson Reuters. However, both companies have a current ratio of less than one, indicating that their current obligations due in the next 12 months are greater than their current assets. Both companies will have to generate high enough operating cash flows to be able to pay off these obligations. Both companies are below the industry average when all five companies are included, with the industry average being 0.982. In terms of solvency, Thomson Reuters is better than the industry average and indicates low debt leverage in comparison to its peers. In contrast, Quebecor has the highest debt leverage of 69% much higher than the industry average, and high in comparison to the five companies. The telecommunications and broadcasting business lines may be causing this significant difference, and the company is likely over leveraged with debt, indicating that the risk of financial distress is high.

(e)

(in millions of dollars)

Quebecor	<u>2011</u>	<u>2010</u>
Cash from operating activities	\$866.3	\$809.9
Cash from investing activities	(913.1)	(704.1)
Cash from financing activities	<u>(49.6)</u>	<u>(162.1)</u>
Net change in cash before discontinued operations & currency adjustments	(96.4)	(56.3)
Foreign Currency adjustment	<u>0.1</u>	<u>(1.0)</u>
Net change in cash	<u><u>\$ (96.3)</u></u>	<u><u>\$ (57.3)</u></u>
Thomson	<u>2011</u>	<u>2010</u>
Cash from operating activities	\$2,597	\$2,678
Cash from investing activities	(1,863)	(1,692)
Cash from financing activities	<u>(1,227)</u>	<u>(1,219)</u>
Net change in cash before discontinued operations & currency adjustments	(493)	(233)
Cash from discontinued operations	56	(6)
Foreign Currency adjustment	<u>(5)</u>	<u>(8)</u>
Net change in cash	<u><u>\$ (442)</u></u>	<u><u>\$ (247)</u></u>

RA5-5 (Continued)

- (f) Quebecor's overall cash position from continuing operations has deteriorated slightly in 2011 from 2010, primarily due to more investment in capital assets, which also required more financing. Thomson Reuters cash flow position overall in 2011 was mostly impacted by the Net Loss incurred during the year, with the company having lower cash flow from operations than the prior year. In addition, acquisitions have more than doubled, resulting in higher cash flows used in investing activities. Similar to Quebecor, this has resulted in a declining cash position from 2010 to 2011.

RA5-6 IASB's DISCUSSION PAPER - PRELIMINARY VIEWS ON FINANCIAL STATEMENT PRESENTATION

- (a) The IASB has proposed that the new format for the Statement of Financial Position will be classified into: Business, Financing, Income Taxes, Discontinued Operations and Equity. The existing format of assets, liabilities and equity would no longer apply. Within the business classification, the assets and liabilities would be separated into operating and investing. Within the financing classification, the financing assets and financing liabilities would be separated. Operating assets and liabilities would include the assets and liabilities used for the core operations that are involved in value creating activities of the company and would include assets and liabilities with respect to customers, suppliers and employees. The investing assets and liabilities would include assets that generate a return of interest, dividends or capital gains. Financing liabilities would include the interest bearing debt that has been raised as capital. Included in this section would also be dividends and interest payable. Cash may also be included as a financing asset if the company uses cash to offset debt requirements. Discontinued operations would include all assets and liabilities related to the discounted businesses. Income taxes would include current income taxes and deferred income tax balances. Finally, equity would include all owner related balances as it currently does.
- (b) The IASB believes that the current format of the statements does not allow comparisons across the statements. For example, the statement of financial position cannot be tied into the statement of income or the cash flow statement. Since the cash flow statement is segregated by activities – operating, financing and investing, these cannot be easily matched to the related assets and liabilities. A standard classification across all statements would be more beneficial from a user's perspective. In other words, the classification set for the statement of financial position would carry through to the statement of comprehensive income and the statement of cash flow. In addition, there are many different alternatives that are followed by companies, and the IASB wants to ensure more consistency for peer comparison purposes. Finally, with all statements prepared with a similar classification, ratio analysis would be more relevant and easier to understand. For example, many analysts would like to be able to segregate operating assets from investing assets to be able to assess where value is being created in a company. The new proposed format would, in the view of the IASB, enhance this analysis. The capital structure of the company would also be separated, making comparisons across industry competitors easier.

RA5-6 (Continued)

- (c) The advantages would certainly be from the user's perspective in the longer term. The more disaggregation of information that can be provided, in a format that splits the various activities of the company, the more useful the information would be. It would also be easier to forecast asset and liability balances and the related income and cash flow that these transactions would generate. Ratios would be more relevant and comparable across companies. The disadvantages would be with the preparers in first preparing this financial format, as well as with the users as they learn how to understand and interpret this new presentation. Time and resources would be required to decide what the appropriate classification should be. Once this classification is decided on, it cannot be changed without an accounting policy change disclosure. The classification for the other statements would also require a significant amount of time and resources to prepare. General ledger accounts may have to change to provide the input data for this new presentation.

Cumulative Coverage Question

Journal Entries:

Reference

1. No entry required – disclosure only
2.

Income Tax Payable	23,000	
Income Tax Expense		23,000
To reallocate income tax payment to offset balance in income tax payable account.		
2. (cont'd)

Income Tax Expense	199,219	
Income Tax Payable		199,219
To record income tax expense based on net income of: $996,095 \times 20\% = \$199,219$.		
On the financial statements, income tax expense will be allocated as follows:		
Income tax expense on continuing operations $(1,161,095 \times 20\% = 232,219)$		
Income tax recovery from loss on discontinued operations $(\$165,000 \times 20\% = 33,000)$		
3.

Dividends	25,000	
Operating Expenses – Instrument Division		25,000
To correctly record dividend payment. (Note: A debit to Retained Earnings would also be correct)		
4.

Operating Expenses – Instrument Division	20,000	
Accounts Payable		20,000
To record year end accounts payable		
Accounts Payable	100,000	
Operating Expenses – Instrument Division		65,000
Operating Expenses – CD Division		35,000
To reverse accounts payable from previous year		

Cumulative Coverage Question (Continued)

10.	Interest Expense	2,500	
	Interest Payable		2,500
	To record interest expense		
	= 5% x \$100,000 x 6/12 = \$2,500.		

Cumulative Coverage Question (Continued)

Account	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Stmnt. Of Fin. Position	
	DR	CR	DR	CR	DR	CR	DR	CR	DR	CR
Cash	53,265				53,265				53,265	
A/R - Instruments	251,000			9-500	250,500				250,500	
A4DA		7,200	5-5,000	5-305		2,505				2,505
Inventory – Instruments	8,000,000				8,000,000				8,000,000	
Inventory – CD's	200,000				200,000				200,000	
Prepaid Ins.	5,000		7-500		5,500				5,500	
Equip – ID	500,000				500,000				500,000	
A/D – ID		350,000		6-50,000		400,000				400,000
A/P		100,000	4-100,000	4-20,000		20,000				20,000
Notes Payable		100,000				100,000				100,000
Interest payable				10-2,500		2,500				2,500
Income tax payable		23,000	2 – 23,000	2-199,219		199,219				199,219
Unearned Revenue		60,000	9-500			59,500				59,500
Common Shares		100				100				100
Retained Earnings		7,453,565				7,453,565				7,453,565
Dividends			3-25,000		25,000				25,000	
Sales – ID		2,500,000				2,500,000		2,500,000		
COGS – ID	1,200,000				1,200,000		1,200,000			
Operating Expenses – ID	150,000		4-20,000	3-25,000 4-65,000	80,000		80,000			
Bad Debt Expense – ID	5,000		5-305	5-5000	305		305			
Insurance Expense – ID	6,600			7-500	6,100		6,100			
Depreciation Expense - ID			6-50,000		50,000		50,000			

Cumulative Coverage Question (Continued)

Sales Revenue – CD		250,000				250,000		250,000		
COGS – CD	350,000				350,000		350,000			
Operating Expenses – CD	100,000			4-35,000	65,000		65,000			
Interest Expense			10-2,500		2,500		2,500			
Income Tax Expense	23,000		2-199,219	2-23,000	199,219		199,219			
Totals	10,843,865	10,843,865	426,024	426,024				2,750,000		
					10,987,389	10,987,389	1,953,124		9,034,265	8,237,389
Net Income							796,876			796,876

Note: On the worksheet, numbers preceded by a hyphen indicate the items that they correspond to on the list of information requiring adjustments .

Cumulative Coverage Question (Continued)

Musical Notes Incorporated Statement of Financial Position As at January 31, 2014

Assets

Current Assets

Cash	\$ 53,265
Accounts receivable (net of AFDA of \$2,505)	247,995
Inventory	8,000,000
Inventory held for sale – related to discontinued operation	200,000
Prepaid expenses	5,500
Total current assets	<u>8,506,760</u>

Property, plant, and equipment

Store equipment	500,000
Less: Accumulated depreciation	<u>(400,000)</u>
Net property, plant and equipment	100,000

Total assets	<u><u>\$ 8,606,760</u></u>

Liabilities and Shareholders' Equity

Current Liabilities

Accounts payable	\$ 20,000
Interest payable	2,500
Income tax payable	199,219
Unearned revenue	59,500
Current portion of note payable	50,000
Total current liabilities	<u>331,219</u>

Notes payable, 5% interest, due 2016	50,000
Total liabilities	<u>381,219</u>

Shareholders' equity

Common shares	100
Retained earnings	8,225,441
Total shareholders' equity	<u>8,225,541</u>

Total liabilities and shareholders' equity	<u><u>\$ 8,606,760</u></u>

Cumulative Coverage Question (Continued)

Musical Notes Incorporated Income Statement and Statement of Retained Earnings For the year ended January 31, 2014

Sales revenue	\$ 2,500,000
Cost of goods sold	1,200,000
Gross profit	1,300,000
Expenses:	
Operating expenses	80,000
Bad debt expense	305
Insurance expense	6,100
Depreciation expense	50,000
Interest expense	2,500
Total expenses	138,905
Income from continuing operations before income tax expense	1,161,095
Income tax expense	232,219
Income from continuing operations	928,876
Discontinued operations	
Loss from operation of discontinued CD Division (net of income taxes of \$33,000)	132,000
Net income	796,876
Add: Retained earnings. February 1, 2013	7,453,565
Less: Dividend	25,000
Retained earnings, January 31, 2014	\$ 8,225,441

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CHAPTER 6

Revenue Recognition

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing assignment
1. Economics and legalities of selling transactions	1, 2	1, 5		1, 2, 4, 5
2. Determine whether a company has earned revenues	3, 4, 5, 6, 7	2, 4, 5		1, 2, 4, 5
3. Measurement and measurement uncertainty	6, 8, 9, 10, 11, 12	11	1	5
4. Collection uncertainty	13, 14, 15	7		
5. Consignment sales and long-term contracts	16, 17, 18, 19, 20, 21, 22, 23, 24	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	2, 3, 4, 5, 6, 7, 8	
6. Present sales transactions and prepare basic disclosures	25			4

ASSIGNMENT CLASSIFICATION TABLE (Continued)

7. Current trends in standard setting for revenue recognition	6, 26	7	1	1, 2, 4
8. ASPE and IFRS	27			6

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E6-1	Economics of transactions – various industries	Moderate	15-20
E6-2	Revenue under the earnings approach – various industries	Moderate	15-20
E6-3	Customer acceptance provisions.	Moderate	10-15
E6-4	Bill and hold.	Moderate	15-20
E6-5	Sales recorded with discounts.	Simple	15-20
E6-6	Revenue recognition on marina sales with discounts.	Moderate	15-20
E6-7	Measurement and collection uncertainty	Simple	10-15
E6-8	Consignment calculations.	Simple	15-20
E6-9	Consignment calculations.	Simple	15-20
E6-10	Bundled sales.	Moderate	15-20
E6-11	Analysis of percentage-of-completion financial statements.	Complex	15-20
E6-12	Gross profit on uncompleted-contract.	Moderate	10-15
E6-13	Recognition of profit on long-term contracts and entries.	Moderate	20-25
E6-14	Recognition of revenue on long-term contract and entries.	Moderate	20-25
E6-15	Recognition of revenue on long-term contract and entries – overall loss.	Moderate	30-35
E6-16	Recognition of profit and balance sheet amounts for long-term contracts.	Simple	15-25
E6-17	Long-term contract reporting.	Moderate	15-25
E6-18	Recognition of profit and balance sheet amounts – zero-profit method and completed-contract method	Moderate	30-35

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
P6-1	Bundled transactions and allocation of fair value	Moderate	30-40
P6-2	Recognition of profit on long-term contract, entries and statements. – earnings approach	Moderate	50-60
P6-3	Recognition of profit on long-term contract, entries and statements – overall loss. – earnings approach	Complex	40-45
P6-4	Recognition of profit on long-term contract, entries and statements – overall loss.	Complex	40-45
P6-5	Completed-contract method.	Moderate	25-30
P6-6	Long-term contract, with overall loss, percentage of completion.	Complex	30-40
P6-7	Long-term contract with interim loss including entries – earnings approach	Moderate	35-40
P6-8	Percentage-of-completion and completed-contract method	Moderate	35-40

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 6-1

	What is being given?	What is being received?
(a)	This transaction involves a sale of goods which are tangible assets. Control transfers to the buyer upon delivery, coincident with the transfer of possession and passing of legal title.	Monetary asset – cash is being received upon delivery.
(b)	This transaction involves a sale of goods which are tangible assets. Control transfers to the buyer upon delivery, coincident with the transfer of possession and passing of legal title.	Monetary asset – a short-term, interest bearing receivable is created upon delivery.
(c)	This transaction involves a sale of services for which the concepts of possession and passing of legal title do not apply.	Consideration in the form of accounting services. This transaction has commercial substance since both services are different.
(d)	This transaction involves both goods and services (also known as multiple deliverables) that are sold together for one fee.	Monetary asset – a short-term receivable is created upon delivery.

BRIEF EXERCISE 6-2

A contract is created when a company sells something.

- (a) The contract created in this transaction is likely evidenced by the sales order or invoice. With terms FOB shipping point, the seller (the manufacturer) is obligated until the goods are shipped; legal title generally passes to the buyer at this point. The buyer obtains the risks and rewards of ownership at the point of shipment. Any loss or damage incurred during shipping would be borne by the buyer.**
- (b) The contract created in this transaction is likely evidenced by the sales order or invoice. With terms FOB destination point, the seller (the manufacturer) is obligated until the goods have been received by the buyer; legal title generally passes to the buyer at this point. Any loss or damage incurred during shipping would be borne by the seller.**
- (c) FOB terms would suggest that legal title passes at point of shipment. However, the seller (the manufacturer) has an additional implicit or constructive obligation in this contract. The seller's past practice of replacing lost or damaged products means that the seller is obligated until the goods are received by the buyer, irrespective of the passing of legal title.**

BRIEF EXERCISE 6-3

XYZ may not be able to record revenue upon delivery. The credit policy does not appear to be a normal practice for XYZ. It appears to be specific to the new product only. Concessionary terms in a sale transaction create measurement uncertainties and alter the economics of the business transaction. This policy may create additional obligations for XYZ and bring into question whether the risks and rewards of ownership, or control, have actually passed. In fact, it may indicate that a sale has not taken place. This is similar in substance to a consignment sale.

BRIEF EXERCISE 6-4

Note: the suggested solution below outlines the main elements in the earnings process. Additional intermediary steps could also be valid.

- (a)The earnings process consists of the following steps:
purchase of necessary raw materials, manufacture of the equipment, and sale to customer. The warranty is not part of the earnings process for the manufacturer – it is a separate arrangement with another vendor.**
- (b)The earnings process consists of the following steps:
purchase of inventory, receipt of sales order from online customer, payment received from customer (coincident with sales order since via credit card), and shipment to customer.**
- (c)The earnings process consists of the following steps:
installing the necessary underground cables and connections for the neighbourhood (occurs during construction of the housing complex so previously done), installing connections to the customer's house (previously done for prior homeowner), activating the account for the existing homeowner, providing monthly service, billing for monthly service, and receiving payment from customer for monthly service.**

BRIEF EXERCISE 6-5

Under the earnings approach, the concern is only about recognizing revenue from the sales contract.

- (a) Revenue would be recorded when the customer purchases the equipment. The risks and rewards of ownership transfer at this point since the customer picks up the equipment upon purchase. At this point, there is no remaining uncertainty and the seller has completed its performance obligations. No accrual is required for warranty in this situation since these obligations will be honoured by another company.**
- (b) Revenue would be recognized when the books are delivered to the customer. At this point, there is no remaining uncertainty and the seller has completed its performance obligations.**
- (c) Assuming there are no separately identifiable services other than the monthly service, revenue would be recognized monthly as the cable service is provided to the customer. The wiring was previously done and anything the company has to do to activate the account is not likely to be a separately identifiable service.**

BRIEF EXERCISE 6-6

Under both approaches, inability to measure parts of the transaction could delay the recognition of revenue. In general, revenue will not be recognized if the sale is not measurable. Revenue can be recognized if an amount to be received can be quantified and any remaining uncertainties can be estimated (i.e. refunds, future service obligations, etc.). Under the earnings approach, measurability of revenues and related costs is a specific revenue recognition criterion. Under the contract-based approach, measurability of revenues and related costs is a general recognition criterion, with measurement uncertainty embedded in the calculation of the transaction price.

(a) Under the earnings approach, the amount of revenue is not measurable if the associated costs are unknown. Revenue will not be recorded until this uncertainty is resolved. Currently, under IAS 11 and 18, if the outcome of the contract is not determinable, then recoverable revenues equal to costs incurred may be recognized as the costs are incurred (the zero-profit method). Under ASPE, if the outcome of the contract is not determinable, the accounting would default to the completed-contract method.

Under the contract-based approach, revenue will not be recorded until the associated costs are reasonably measurable. Measurement uncertainty will be embedded in the calculation of the transaction price through the use of the “expected value” and “most likely” methods.

(b) Under the earnings approach, revenue will be recognized at delivery if an estimate can be made for the amount that may be payable by the seller. Otherwise, revenue would be recorded after the 60-day protection period has lapsed or earlier if and when the amount payable is estimable.

Under the contract-based approach, revenue will be recognized when the buyer obtains control over the good or service (in this case upon delivery). Expected value of the cash refund will be recorded separately as a refund liability.

BRIEF EXERCISE 6-6 (continued)

(c) Under the earnings approach, revenue will be delayed until the seller receives payment or can estimate the liability for potential returns. The agreement to allow unlimited returns is concessionary and may mean that the sale is more like a consignment type sale in substance.

Under the contract-based approach (RED), revenue for the items that are not expected to be returned will be recognized when the buyer obtains control over the good or service (upon delivery). The expected value of the returns will be recorded separately as a refund liability (not recognized as revenue). The company would use the expected value method to estimate the revenue to be recognized.

BRIEF EXERCISE 6-7

- (a) Revenues are recognized as earned over time (as the service is being provided). Mackenzie is providing construction services to Designer. Designer has control/legal title to the office building being constructed, and is able to specify major structural changes during its construction.**
- (b) Control/legal title to the office building does not pass to Designer until the end of the contract, therefore Mackenzie would account for the transaction like any other inventory transaction. The costs would be accumulated in an inventory account and sale of the office building would be booked at the end of the contract.**

BRIEF EXERCISE 6-8

Under the earnings approach, revenue is generally measured at fair value. Fair value is generally represented by the value of the consideration received or receivable from the buyer.

- (a) Revenue would be measured at fair value which would be the invoiced amount.**
- (b) Revenue would be measured at fair value which would be the invoiced amount for the goods sold. Interest income on the receivable would be recorded separately on an accrual basis.**
- (c) Revenue would be measured at the fair value of the consideration received (i.e. accounting services received by the law firm). If the fair value of the consideration received is not available, the fair value of the services provided would be used in lieu (i.e. value of the legal services provided).**
- (d) Sales are generally measured at fair value. Since the sale is on credit and the payment term extends over 1-year and is non-interest bearing, the receivable should be discounted to reflect the time value of money. The difference between the stated amount in the contract and the discounted amount represents interest that should be recognized over the one-year term.**

The (discounted) balance represents the fair value of the total revenue for the bundled transaction. Since this is a bundled sale, this amount would be allocated to the separate units in the transaction. Given that the equipment, three-year maintenance package, and one-year manufacturer's warranty are each sold separately, the fair value (or stand-alone value) of each must be determined, in order to allocate the total purchase price based on relative fair value method. The residual value method is an alternative that is currently allowed under both IFRS and ASPE.

BRIEF EXERCISE 6-9

	(a)	(a)	(b)	(b)
	Relative Fair Value Method Calculation	Relative Fair Value Method Allocation	Residual Value Method Calculation	Residual Value Method Allocation
Mountain Bike	$\$1,100 /$ $(\$1,100 +$ $\$100) \times$ $\$1,000$	\$916.67	\$1,000 – \$100	\$900
Maintenance Package	$\$100 /$ $(\$1,100 +$ $\$100) \times$ $\$1,000$	\$83.33	\$1,000 – \$900	\$100
Total		\$1,000		\$1,000

BRIEF EXERCISE 6-10

a) Sales Revenue..... 100
 Cash 100
 ($\$110,000 - \$100,000$) X 1%

b) Cash..... 100
 Inventory 100
 ($\$110,000 - \$100,000$) X 1%

BRIEF EXERCISE 6-11

Under IFRS, the discount rate should be whichever of the following is more clearly determinable: (1) the prevailing rate for a similar financing arrangement or (2) the imputed rate that discounts the cash flows to the current cash selling price of the unit sold.

The present value of the cash flows using 8% would result in a selling price of \$925.93 ($\$1,000 \times PVF_{1, 8\%} = \$1,000 \times 0.92593$), which is greater than the cash selling price of \$900. Therefore, it may be more prudent to use the cash selling price to impute the interest rate.

The discount rate required to equate the present value of the cash flows with the cash selling price, is approximately 11% (cash selling price of \$900 is approximately equal to $\$1,000 \times PVF_{1, 11\%} = \$1,000 \times 0.90090$).

BRIEF EXERCISE 6-12

Amount due in one year

$$\$50,000 \times PVF_{1, 12\%} = \$50,000 \times 0.89286 \quad 44,643$$

Amount due in two years

$$\$50,000 \times PVF_{2, 12\%} = \$50,000 \times 0.79719 \quad \underline{39,860}$$

Revenue to be recognized on the date of sale 84,503

NOTE: This can also be calculated by treating the payments as an ordinary annuity:

PMT = \$50,000; n=2; i=12: PV factor = 1.69005.

$$\$50,000 \times 1.69005 = \$84,503$$

BRIEF EXERCISE 6-13

- a) Under ASPE, probable collection of revenue is a criterion for revenue recognition. If collection is uncertain, revenue recognition would default to a cash basis.
- b) Under IFRS, probable collection of revenue is a criterion for revenue recognition. If collection is uncertain, revenue recognition would default to a cash basis. Additionally, under IAS 11 and 18, when the outcome of a service transaction is not reliably estimable, recoverable revenue may only be recognized equal to recognized expenses (i.e. zero-profit method).

BRIEF EXERCISE 6-14

This is a non-monetary transaction without commercial substance because Eastern and Western have entered into the transaction to swap inventory. After the transaction is complete and Western repays Eastern with the chemical compound at a later date, both entities will be in the same position and future cash flows will be the same in terms of timing, amount, and/or riskiness.

Accounts Receivable	\$100
Inventory	\$100

BRIEF EXERCISE 6-15

- a) Builder will recognize revenue using the percentage-of-completion method because the transaction is seen as a provision of a service. There is a contract in place upfront to construct the warehouse according to the specifications of the buyer who can require major structural changes during construction. The buyer has legal title and control over the warehouse as it is being built.**

- b) Builder may treat the warehouse as inventory until it is sold because the transaction is seen as a provision of a good and because Builder normally constructs building structures for sale upon completion. There is no contract in place to construct the warehouse and Builder has legal title and control over the warehouse as it is being built. Revenue will be recognized upon sale of the warehouse as inventory.**

BRIEF EXERCISE 6-16

Shipment of Consigned Merchandise

Inventory on Consignment	550,000	
Finished Goods Inventory		550,000

Payment of Freight

Inventory on Consignment	5,000	
Cash		5,000

Payment of advertising by consignee

No entry made by consignor

Sale of merchandise by consignee

No entry made consignor until notification of sale received

Notification of sale received by consignor

Cash	555,375	
Advertising Expense	1,500	
Commission Expense	61,875	
Revenue from Consignment Sales		618,750

Cost of Goods Sold	416,250	
Inventory on Consignment		416,250
(\$550,000 + \$5,000) x 75%		

BRIEF EXERCISE 6-17

(a) Inventoriable costs:

500 units shipped at cost of \$100 each.....	\$50,000
Freight	<u>1,250</u>
Total inventoriable cost.....	<u>\$51,250</u>
 80 units on hand (80/500 X \$51,250)	 <u>\$ 8,200</u>

(b) Calculation of consignment profit:

Revenue from consignment sales (420 X \$160)	\$67,200
Cost of goods sold (420/500 X \$51,250)	(43,050)
Commission expense (20% X \$67,200)	<u>(13,440)</u>
Profit on consignment sales	<u>\$10,710</u>

(c) Remittance of consignee:

Consignment sales.....	\$67,200
Less: Commission revenue	<u>(13,440)</u>
Remittance from consignee.....	<u>\$53,760</u>

BRIEF EXERCISE 6-18

Construction in Process	1,600,000
Materials, Cash, Payables, etc.....	1,600,000
To record the cost of construction	

Accounts Receivable	1,750,000
Billings on Construction in Process	1,750,000
To record progress billings	

Cash	1,500,000
Accounts Receivable	1,500,000
To record collections	

Construction in Process*.....	357,800
Construction Expenses	1,600,000
Revenue from Long-Term Contracts.....	1,957,800
To recognize revenue and gross profit	

*Contract price:	(A)	<u>\$5,020,000</u>
Costs to date	(B)	1,600,000
Estimated costs to complete		<u>2,500,000</u>
Estimated total costs	(C)	<u>4,100,000</u>
Estimated total gross profit	A – C	920,000
Percent complete	B/C	39%
Revenue to date (A × % completed)	(D)	1,957,800
Gross profit to date (D - B)		357,800

BRIEF EXERCISE 6-19

(a) If Pennfield is reporting under IFRS:

If the outcome cannot be reliably measured, recoverable revenues equal to costs are recognized under IAS 11 and 18 (i.e. zero-profit method). No gross profit is recorded in 2014. Note that \$1,500,000 has already been recovered and the company would have to ensure that the remaining \$100,000 is recoverable before recognizing the full \$1,600,000.

The journal entry would be as follows:

Construction Expenses	1,600,000
Revenue from Long-Term Contracts ...	1,600,000

(b) If Pennfield is reporting under ASPE:

The completed-contract method is allowed as a default method for long-term contracts under ASPE where the percentage complete cannot be measured. Revenue would only be recorded when the contract is completed.

BRIEF EXERCISE 6-20

Construction in Process	3,300,000	
Materials, Cash, Payables, etc.....		3,300,000
Accounts Receivable	5,100,000	
Billings on Construction in Process ..		5,100,000
Cash	2,900,000	
Accounts Receivable.....		2,900,000

BRIEF EXERCISE 6-21

(\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price:	<u>\$2,000</u>	<u>\$2,000</u>	<u>\$2,000</u>
Costs:			
Opening balance of costs	0	900	1,800
Costs incurred during the year	<u>900</u>	<u>900</u>	<u>400</u>
Costs to date	900	1,800	2,200
Estimated costs to complete	<u>900</u>	<u>300</u>	<u>0</u>
Estimated total costs	<u>1,800</u>	<u>2,100</u>	<u>2,200</u>
 Estimated total gross profit	 200	 (100)	 (200)
Percent complete	50.00% ¹	85.71% ²	100%
 Revenue to date	 1,000	 1,714	 2,000
Less previously recognized revenue	<u></u>	<u>(1,000)</u>	<u>(1,714)</u>
Revenue for the year	<u>1,000</u>	<u>714</u>	<u>286</u>
 Gross profit to date (total × %)	 100	 (100) ³	 (200)
Less previously recognized gross profit	<u>0</u>	<u>100</u>	<u>(100)</u>
Gross profit for the year	<u>100</u>	<u>(200)</u>	<u>(100)</u>
 Construction costs for the year	 <u>\$900</u>	 <u>\$914</u>	 <u>\$386</u>

¹ \$900 / \$1,800 = 50%

² \$1,800 / \$2,100 = 85.7%

³ 100% of the loss must be recognized

Under the percentage of completion method, the increase in costs requires an adjustment in the current period for the excess profit that was recognized on the project in prior years.

BRIEF EXERCISE 6-21 (Continued)

Journal Entries:

2014 JE

Construction in Process	900	
Materials, Cash, Payables, etc		900

Construction Expenses	900	
Construction in Process	100	
Revenue from Long-Term Contracts		1,000

2015 JE

Construction in Process	900	
Materials, Cash, Payables, etc		900

Construction Expenses	914	
Construction in Process		200
Revenue from Long-Term Contracts		714

2016 JE

Construction in Process	400	
Materials, Cash, Payables, etc		400

Construction Expenses	386	
Construction in Process		100
Revenue from Long-Term Contracts		286

BRIEF EXERCISE 6-22

(\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Costs to date	\$900	\$1,800	\$2,200
Estimated costs to complete	<u>900</u>	<u>300</u>	<u>0</u>
Estimated total costs	1,800	2,100	2,200
Contract price	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>
Loss to date	0	(100)	(200)
Less previously recognized loss	<u>0</u>	<u>0</u>	<u>(100)</u>
Loss for the year	<u><u>0</u></u>	<u><u>(\$100)</u></u>	<u><u>(\$100)</u></u>

Journal entry for 2015

Loss from Long-term Contracts.....	100,000	
Construction in Process		100,000

Under the completed-contract method, when cost estimates at the end of the period indicate a loss will result once the contract is completed, the entire estimated loss must be recognized in the current period.

BRIEF EXERCISE 6-23

Under IAS 11 and 18 and the zero-profit method, recoverable revenues equal to costs incurred are recognized, and no gross profit is recorded in 2014. Note that \$35 million has already been recovered and Lombardo would have to ensure that the remaining \$7 million is recoverable before recognizing the full \$42 million.

The journal entry would be as follows:

Construction Expenses	42,000,000
Revenue from Long-Term Contracts ...	42,000,000

BRIEF EXERCISE 6-24

Under the completed-contract method, revenue would only be recorded when the contract is completed. No revenue or gross profit would be recognized in 2014.

BRIEF EXERCISE 6-25

Where Rancourt acts as principal on the sale of owned properties, it would present the revenue from these sales at the gross amount. Where Rancourt acts as broker, the revenue would be presented at the net amount. Only the commission that Rancourt receives would be presented as revenue.

BRIEF EXERCISE 6-26

As noted in Chapter 2, “Revenues are increases in economic resources, either by inflows or other enhancements of an entity’s assets or by settlement of its liabilities, which result from an entity’s ordinary activities.”

As such, revenue is an increase in assets, a decrease in liabilities or some combination of the two. Based on those definitions, the contract-based model involves recognizing revenue when the entity has a right to payment and satisfies the performance obligation. By focusing on changes in assets and liabilities, the contract-based approach does not abandon the earnings approach. On the contrary, the IASB and FASB feel that focusing on changes in assets and liabilities will bring discipline to the earnings approach so that entities apply revenue recognition principles more consistently. In other words, it is felt that under the contract-based approach, there will be more agreement on whether an asset has increased or a liability has decreased, than there is currently on what an earnings process is and whether it is complete.

Under the earnings approach, the concern is only about recognizing revenue from the sales contract.

The contract-based approach is concerned about **both the recognition of the sales contract and the related revenue. Under the contract-based approach, the contract(s) with the customer are identified, the separate performance obligations in the contract are identified, the transaction price is determined and allocated, and revenue is recognized when a performance obligation is satisfied.**

BRIEF EXERCISE 6-26 (Continued)

Both methods require that the revenue be measurable and collectible before recognition can occur. However, under the contract-based approach, measurability and collectibility are not considered specific recognition criteria; measurement uncertainty is embedded in the calculation of the transaction price, and customer credit risk is measured upon initial recognition of the revenue and recorded in a separate Provision account on the income statement.

Under the earnings approach, revenue recognition depends on the company's earnings process. Revenue is recognized in a manner consistent with this earnings process and when the company has substantially completed its performance obligations. This approach focuses on measuring revenue and costs and appropriately reflecting these in the income statement. The concept of risks and rewards of ownership is central to the earnings approach since it establishes ownership. Revenue from sale of goods is recognized when ownership transfers or passes to the buyer. Revenue from sale of services is recognized when services are provided.

Under the contract-based approach, revenue is recognized when the entity satisfies a performance obligation, which occurs when the customer obtains control over the good or service. Performance obligations represent what the company has agreed to sell or do under the contract. The concept of control, central to this approach, is based on a legalistic view. Revenue is recorded when legal title passes. This requires less judgment than the risks and rewards test under the earnings approach. Under the earnings approach, an assessment of risks and rewards may show that both the buyer and the seller have some, but not all of the risks and rewards associated with the good or service.

BRIEF EXERCISE 6-27

Under both ASPE and existing IFRS, the earnings approach is currently used. Revenue is recognized when performance is substantially complete and the revenue is measurable and collectible. Both ASPE and IFRS are principles based and therefore explicit guidance is not given. Under the proposed IFRS contract-based model, revenue is recognized when the entity satisfies a performance obligation, which occurs when the customer obtains control over the good or service.

Under ASPE, both the percentage-of-completion and completed-contract methods are allowed for long-term contracts. Under IFRS, the completed-contract method is not mentioned. However, when the earnings process consists of one single critical event, the revenue is recognized at the end of the contract. For longer term service contracts, more emphasis is placed on attempting to measure the costs and revenues where measurement uncertainty exists. Where the contract consists of constructing an asset and control/legal title does not pass until the end, the revenue is recognized at the end.

Under IFRS, more detailed guidance is provided for accounting under the percentage-of-completion method. If the outcome of the contract is not reliably estimable, only revenue equal to recognized expenses may be recognized (i.e. zero-profit method).

SOLUTIONS TO EXERCISES

EXERCISE 6-1 (20-25 minutes)

- 1. A service is being sold – Costco will provide the customer with access to the store and merchandise for one year.**
- 2. A combination of goods and services is being sold – DOT is providing goods and financing services for one year.**
- 3. A service is being sold – Toronto Blue Jays is providing entertainment services for April 1 through October.**
- 4. A service is being sold – CIBC is providing financing services for two years.**
- 5. A service is being sold – Seneca is providing educational services for September to December.**
- 6. A good is being sold – Sears is providing the sweater.**
- 7. A combination of goods and services is being sold – Hometown is providing goods and warranty service.**
- 8. A service is being sold - Premier Health Clubs is in business to provide health club facilities and services to members.**

EXERCISE 6-2 (30-35 minutes)

a) Under the earnings approach, revenue recognition depends on the company's earnings process and how a company adds value for its customers. Revenue is recognized in a manner consistent with the earnings process and when (for sale of goods) risks and rewards of ownership are transferred to the customer; the vendor has no continuing involvement in, nor effective control over, the goods sold; costs and revenue can be measured reliably; and collection is probable. This approach focuses on measuring revenues and costs and appropriately reflecting these in the income statement. This method requires that the revenue be measurable and collectible before recognition can occur.

b) Revenue would be recognized and recorded as follows:

1. As this represents a sale of services, the focus for revenue recognition is performance. The earnings process here is continuous for the one-year term. The percentage-of-completion method should be used and revenue would be recorded evenly over the one-year term.	At time of membership purchase: Dr. Cash Cr. Unearned Revenue Each month over the 1-year term: Dr. Unearned Revenue Cr. Service Revenue

EXERCISE 6-2 (Continued)

2. This represents a bundled sale of goods and services. a. First, as this is a non-interest bearing receivable, the fair value of the furniture sold may be determined by discounting to reflect the time value of money. b. For the sale of goods, revenue is generally recognized when the critical event in the earnings process is completed. This normally occurs on delivery since the risks and rewards transfer at this point. c. The interest portion will be accrued over the one-year term.	At time of delivery: Dr. Accounts Receivable Cr. Sales Revenue Over the one-year term of the loan: Dr. Interest Receivable Cr. Interest Income Upon final payment: Dr. Cash Cr. Accounts Receivable Cr. Interest Receivable
3. This is a sale of services. The earnings process here is continuous for the seven-month term. Fee revenue for performances, events, and so on should be recognized when the event takes place. When a subscription is sold for a pre-set number of events, the total fee should be allocated to each event. Therefore, revenue should be recognized on a per-game basis over the season from April to October.	At time of ticket purchase: Dr. Cash Cr. Unearned Revenue As each game is played during the season: Dr. Unearned Revenue Cr. Service Revenue
4. This is sale of services. The earnings process here is continuous and interest revenue should be accrued evenly over the two-year term of the loan.	At time loan is provided: Dr. Notes Receivable Cr. Cash Over the two year loan term: Dr. Interest Receivable Cr. Interest Income Upon final payment: Dr. Cash Cr. Notes Receivable Cr. Interest Receivable

EXERCISE 6-2 (Continued)

5. This is sale of services. The earnings process here is continuous for the four-month term. Revenue should be recognized over the instructional term, beginning in September.	At time of fee payment in September: Dr. Cash Cr. Unearned Revenue Over four-month term: Dr. Unearned Revenue Cr. Service Revenue
6. For the sale of goods, revenue is generally recognized when the critical event in the earnings process is completed. This normally occurs on delivery since the risks and rewards transfer at this point. Revenue would be recorded upon delivery in September as long as any returns could be estimated.	At time of delivery in September Dr. Accounts Receivable Cr. Sales Revenue At time of payment in October: Dr. Cash Cr. Accounts Receivable
7. Revenue would be recorded for the machine upon delivery in June. The warranty is a separate service (or bundled service) that would be earned over the five-year term.	At time of delivery in June Dr. Cash Cr. Sales Revenue Cr. Warranty Liability Over the 5-year period Dr. Warranty Liability Cr. Warranty Revenue

EXERCISE 6-2 (Continued)

8. As this represents a sale of services, the focus for revenue recognition is performance.	At time of medical assessment (receipt of initiation fees):
a. Assuming Premier is not in the business of providing medical services, the initiation fee represents a cost recovery of a requirement for membership.*	Dr. Cash Cr. Sales Revenue Dr. Expenses Cr. Cash/ Accts Payable
b. The earnings process for the ongoing fee is continuous. The percentage-of-completion method should be used and revenue would be recorded evenly over the period of membership.	Over the membership period: Dr. Cash Cr. Service Revenue
*If Premier was also in the medical services business, a case could be made for allocating the total receipts for both the initiation and the monthly fee (over the term of each contract); recognition of the portion allocated to the medical assessment on completion of that service; and recognition of the remainder evenly over the period of the contract.	

EXERCISE 6-3 (15-20 minutes)

- (a) Customer acceptance provisions, such as extended trial periods and goods shipped subject to approval, are examples of concessionary terms. Concessionary terms may create additional performance obligations, and if the concessionary terms are more lenient than usual, they may complicate the accounting. Customer acceptance provisions that are more lenient than usual may mean that risks and rewards of ownership have not yet transferred to the customer, or that the vendor has continuing involvement in, or effective control over, the goods sold. Customer acceptance provisions must be carefully analyzed to determine when revenue can be recognized.
- (b) Revenue would be recognized as follows:
1. For sale of goods, risks and rewards transfer when the customer accepts the books or the trial period lapses.
 2. Risks and rewards transfer at point of sale. It would be appropriate to recognize the sale as long as a reasonable estimate of sales returns could be accrued at the same time. If no reasonable amount for the expected sales returns can be established from historical experience, then the sale should be postponed until the return privilege of 30 days expires.
 3. For Shivani Inc. the risks and rewards do not transfer until the customer's specifications are fulfilled. These specifications are not subjective and are instead very specific to the customer's needs. Shivani should only recognize revenue when the specifications are achieved and the goods are delivered (if highly likely that the delivered goods are acceptable) or when the customer indicates acceptance of the goods by signing off (if there is uncertainty about whether the specifications have been met).

EXERCISE 6-3 (Continued)

- (c) If the company advertises that “customer satisfaction is guaranteed”, a customer may expect that the company will accept returns even beyond the 30-day contractual refund period in order to honour its advertised statement. The company may have a constructive obligation as a result of signalling to customers that returns may be honoured beyond the 30-day contractual refund period. This may result in a performance obligation that needs to be reported on the balance sheet.**

EXERCISE 6-4 (15-20 minutes)

(a) Under the earnings approach, revenue is generally recognized when risks and rewards are transferred (i.e. normally delivery). Where a bill and hold policy is not a normal business practice, the transaction should be reviewed to ensure it is a bona fide sales transaction, and not just an aggressive sales strategy that will not be realizable.

In order to assess whether or not the sale to Jamali should be included as a sale as at December 31, 2014, one must first look at the conditions under which the customer requested that the shipment be put on hold until a January 2, 2015 shipping date. Care must be taken to determine which party has the significant risks and rewards of ownership.

An argument could be made to recognize the revenue in fiscal 2014, because there is a sound business reason for holding the goods, the customer acknowledges the delayed delivery, and normal payment terms apply. However, the inventory was left on DSI's warehouse shelves with unsold inventory, meaning that the inventory was not identified and ready for delivery at December 31, 2014.

(b) Under IFRS, in addition to the general revenue recognition criteria, there are specific revenue recognition criteria for bill and hold transactions, as follows:

The buyer takes legal title and

- 1. Delivery is probable;**
- 2. Item is on hand, identified, and ready for delivery;**
- 3. Buyer acknowledges the deferred delivery; and**
- 4. Payment terms are normal.**

If Jamali took legal title to the goods and if the inventory was on hand, identified, and ready for delivery on December 31, 2014, under IFRS, an argument could be made to recognize the revenue in fiscal 2014.

EXERCISE 6-5 (15-20 minutes)

- a) Under the earnings approach, revenue for the 2015 and 2016 dock fees will be deferred in 2014 and recognized evenly as service is provided in 2015 and 2016.

(b) Journal entries for Fiscal 2014

Cash (2014 slips) (500 X \$1,000).....	500,000	
Rent Revenue.....		500,000

Cash (2015 slips) [200 X \$1,000 X (1.00 – .05)]	190,000	
Unearned Revenue		190,000

Cash (2016 slips) [160 X \$1,000 X (1.00 – .25)]	120,000	
Unearned Revenue		120,000

(c)

The cost of the discount given for the 2016 boating season is \$40,000 (25% of \$160,000). The \$120,000 cash flow is obtained 15 months earlier. To calculate the interest rate that applies:

Using a financial calculator:

PV	\$ (120,000)	
I	?	Yields 25.88%
N	1.25	
PMT	0	
FV	\$160,000	
Type	0	

Excel formula: =RATE(nper,pmt,pv,fv,type)

The annual interest rate of 25.88% per year is the real cost of the discount offered which can then be used to compare with other sources of financing.

EXERCISE 6-6 (25-30 minutes)

- (a) Under the earnings approach, sales involving more than one item must be separated or bifurcated into separate units. After the separate units are determined, the overall price is allocated to each unit using either the relative fair value method (preferred method if the fair value of each unit in the bundle is known) or residual value method (permitted under current IFRS and ASPE if the fair value of the undelivered unit is known).

Revenue would then be recorded for each unit when the relevant revenue recognition criteria are met.

- (b) Relative fair value method: this can only be used when the fair value of each unit in the bundle is known.

	<u>Fair Value</u>		<u>Price</u>
Equipment	\$2,300	69.7%	\$1,882
Internet Service	<u>1,000</u>	30.3%	<u>818</u>
	<u>\$3,300</u>		<u>\$2,700</u>

Revenue would then be recorded for each unit when the relevant revenue recognition criteria are met:

- For the sale of equipment, the criteria would be met upon delivery; accordingly, revenue of \$1,882 could be recognized upon delivery.
- For the related services, the \$818 would be recognized evenly over the one-year term.

EXERCISE 6-6 (Continued)

(c)Residual value method: This is used when the value of the undelivered unit is known.

1. Assume the value of the equipment is known but the value of the Internet service is unknown.

Remember that under the earnings approach, ability to measure the revenues reliably is a required condition for revenue recognition. Inability to measure the undelivered part of the transaction could delay the recognition of revenue. Revenue can be recognized if an amount to be received can be quantified and any remaining uncertainties can be accrued (i.e. refunds, future service obligations, etc.).

If the value of the undelivered unit (Internet service) is not known, we cannot value the separate units and we have to treat the transaction as one unit. This is because of the risk of manipulating the value of the delivered unit (i.e. reporting it for more than it is really worth) and recognizing revenues prematurely. The entire revenue of \$2,700 would be recorded over the term of the contract.

2. Assume the value of the Internet service is known but the value of the equipment is unknown. As long as the value of the undelivered unit (Internet service) is known, the residual value method may be used.

Total price	\$2,700
Less value of the Internet service	<u>1,000</u>
Value assigned to the equipment	<u>\$1,700</u>

EXERCISE 6-6 (Continued)

Revenue would then be recorded for each unit when the relevant criteria are met:

- **For the sale of equipment, the criteria would be met upon delivery; accordingly, revenue of \$1,700 would be recognized upon delivery.**
- **For the related services, the \$1,000 would be recognized over the one-year term.**

EXERCISE 6-7 (10- 15 minutes)

- (a) Under the earnings approach, revenue is measured at fair value, which is generally represented by the value of the consideration received or receivable. Under the contract-based approach, revenue is measured at the transaction price, which is the amount that the entity expects to receive.**

Revenue would be recognized upon delivery under both the earnings approach (i.e. when risk and rewards transfer) and contract-based approach (i.e. when legal title and control pass). Under both approaches, the receivable should be discounted to reflect the time value of money.

The earnings approach requires assurance that collection of the receivable will ultimately occur (i.e. economic benefits will flow to Genesis) before revenue can be recognized. As long as it is possible to estimate uncollectible amounts, (i.e. based on historical data), the revenue may be booked and the potential uncollectible amount may be accrued. Under the contract-based approach, collectibility is considered a general (and not a specific) revenue recognition criteria; customer credit risk is assessed and accounted for separately when revenue is first recognized.

- (b) If Genesis is a new company, it may be unable to estimate uncollectible amounts. Under the earnings approach, If collection is not reasonably assured, accounting would default to the cash basis. Under the contract-based approach, collectibility is considered a general (and not a specific) revenue recognition criteria; customer credit risk must be measured and presented separately on the income statement as a separate line item (as a Provision), not as part of revenue.**

EXERCISE 6-7 (Continued)

(c) Deep discounts and extended payment terms are examples of concessionary terms. Deep discounts and extended payment terms may signal higher than normal customer credit risk, or that no sale has actually taken place. Under both the earnings and contract-based approaches, concessionary terms would require further investigation to determine if a valid sale exists.

Under the earnings approach, revenue can be recognized when the following revenue recognition criteria are met:

- 1. Risks and rewards are transferred;**
- 2. Genesis has no continuing involvement in, nor effective control over, the goods sold;**
- 3. Revenue is reliably measurable (and the receivable can be discounted to reflect time value of money); and**
- 4. Collectibility is probable (and an appropriate allowance is recorded for returns and non-collection).**

Under the contract-based approach, revenue can be recognized when a performance obligation is satisfied (i.e. when control passes). Collectibility and measurability are considered general (and not specific) revenue recognition criteria. If Genesis offers deep discounts, it may use the expected value of the consideration (the sum of the probability weighted amounts) or the most likely amount to record revenue. If Genesis offers extended payment terms, the transaction price should be discounted using a discount rate that reflects the customer's credit risk (the discount rate may be calculated using the discount rate needed to equate the payments required to the current cash selling price of the goods sold).

EXERCISE 6-8 (15-20 minutes)

(a) Inventoriable costs:

80 units shipped at cost of \$25,000 each	\$2,000,000
Freight	<u>5,800</u>
Total inventoriable cost	<u>\$2,005,800</u>
43 units on hand ($43/80 \times \$2,005,800$)	<u>\$1,078,118</u>

(b) Calculation of consignor's profit:

Revenue from consignment sales	
($37 \times \$33,500$)	\$1,239,500
Cost of goods sold ($37/80 \times \$2,005,800$)	(927,683)
Commission expense ($6\% \times \$1,239,500$)	(74,370)
Advertising expense	(3,200)
Inspection costs	<u>(4,200)</u>
Profit on consignment sales	<u>\$ 230,047</u>

(c) Remittance of consignee:

Consignment sales		\$1,239,500
Less: Commission revenue	\$74,370	
Advertising	3,200	
Inspection	<u>4,200</u>	<u>81,770</u>
Remittance from consignee		<u>\$1,157,730</u>

EXERCISE 6-9 (15-20 minutes)

Chang Accounting Books (Consignor)

On shipment

Inventory on Consignment.....	120,000	
Finished Goods Inventory.....		120,000

Payment of freight

Inventory on Consignment.....	5,000	
Cash.....		5,000

Notification of sales and expenses and remittance of cash

Cash	128,000	
Advertising Expense.....	8,000	
Commission Expense.....	24,000	
Revenue From Consignment Sales		160,000

Adjustment of inventory on consignment for cost of sales

Cost of Goods Sold.....	93,750	
Inventory on Consignment.....		93,750 *
*.75 X (120,000 + 5,000) = 93,750		

XYZ Accounting Books (Consignee)

Sales of consigned merchandise (Record each sale throughout the period as it occurs. This will accumulate to the \$160,000 total.)

Cash	160,000	
Accounts Payable		160,000

Notification of sales and expenses and remittance of cash

Accounts Payable	160,000	
Advertising Expense.....		8,000
Commission Revenue.....		24,000
Cash.....		128,000

EXERCISE 6-10 (15-20 minutes)

(a) Contract billings to date **\$1,236,500**

Less accounts receivable 12/31/14	<u>996,500</u>
Portion of contract billings collected	<u><u>\$ 240,000</u></u>

(b) $\frac{\$863,629}{\$2,015,000} = 42.86\%$

The ratio of gross profit to revenue recognized in 2014 is therefore 42.86%. Apply this ratio to the total contract price $\$10,000,000 \times .4286 = \$4,286,000$ to arrive at the initial estimated total gross profit before tax on the contract.

c) There is no relationship between the progress in completion (Construction in Process) and the amounts billed to customers (Contract Billings). The terms of the contract might require that the customer obtain specific deliverables from the contractor in order for a progress billing to be allowed. These are sometimes referred to as milestones. Since the percentage-of-completion method is based on the contractor's estimates of the total costs to complete the contract, these amounts are unknown to the customer. Ultimately the percentage of completion will be 100% and the amount of the billings will equal the contract amount. There is no set ratio of the relationship between these two amounts during the contract.

EXERCISE 6-11 (10-15 minutes)

Lisboa Limited
Calculation of Gross Profit to Be
Recognized on Uncompleted Contract
Year Ended December 31, 2014

Fixed fee	<u>\$ 1,500,000</u>
Total estimated cost (\$2,700,000 + \$4,900,000)	7,600,000
Percent complete (\$2,700,000 ÷ \$7,600,000)	<u>35.53%</u>
Gross profit to recognize (\$1,500,000 X 35.53%)	<u>\$ 532,950</u>

It should be noted that the gross profit is fixed in absolute terms by contract to an amount of \$1,500,000. Consequently, the amount of the fee that has been earned to date can be based on costs to date divided by the total estimated contract costs. If this does not provide a reasonable estimate of the progress on the contract, engineering estimates or another approach could be used as long as it attempts to relate the revenue recognized to the revenue actually earned.

EXERCISE 6-12 (30-40 minutes)

(a) 1. Gross profit

		<u>2014</u>	<u>2015</u>
Contract Price:	(A)	<u>\$10,000,000</u>	<u>\$10,000,000</u>
Opening balance of costs		0	2,180,000
Costs incurred during the year		<u>2,180,000</u>	<u>3,100,000</u>
Costs to Dec. 31	(B)	<u>2,180,000</u>	<u>5,280,000</u>
Estimated costs to complete		<u>4,300,000</u>	<u>1,700,000</u>
Estimated total costs	(C)	<u>6,480,000</u>	<u>6,980,000</u>
 Percent complete (*)	 B/C	 33.64%	 75.64%
 Revenue to Dec. 31 (A X % complete)		 3,364,000	 7,564,000
Less previously recognized revenue		<u>0</u>	<u>(3,364,000)</u>
Revenue for the year	D	<u>3,364,000</u>	<u>4,200,000</u>
 Construction costs for the year	B	 2,180,000	 3,100,000
 Gross profit for the year	D-B	 <u>\$1,184,000</u>	 <u>\$1,100,000</u>

(*) note percentages have been rounded to 2 decimal places

EXERCISE 6-12 (Continued)

2.

2014:

Construction in Process	2,180,000	
Materials, Cash, Payables, etc.....		2,180,000
Accounts Receivable	3,000,000	
Billings on Construction in Process		3,000,000
Cash	2,000,000	
Accounts Receivable		2,000,000
Construction in Process	1,184,000	
Construction Expenses	2,180,000	
Revenue from Long-Term Contracts		3,364,000

2015:

Construction in Process	3,100,000	
Materials, Cash, Payables, etc.....		3,100,000
Accounts Receivable	4,000,000	
Billings on Construction in Process		4,000,000
Cash	2,000,000	
Accounts Receivable		2,000,000
Construction in Process	1,100,000	
Construction Expenses	3,100,000	
Revenue from Long-Term Contracts		4,200,000

EXERCISE 6-12 (Continued)

(b)

2014:

Income Statement

Revenue from long-term contract	\$3,364,000
Construction Expenses	<u>2,180,000</u>
Gross profit	\$1,184,000

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable	\$ 1,000,000
Inventories—construction in process totalling \$3,364,000* less billings of \$3,000,000	= 364,000

*Total costs to date	\$2,180,000
2014 Gross profit	<u>1,184,000</u>
	<u>\$3,364,000</u>

2015:

Income Statement

Revenue from long-term contract	\$4,200,000
Construction Expenses	<u>3,100,000</u>
Gross profit	\$1,100,000

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable	\$ 3,000,000**
Inventories—construction in process totalling \$7,564,000** less billings of \$7,000,000	564,000

$$**\$3,000,000 = \$3,000,000 + \$4,000,000 - \$2,000,000 - \$2,000,000$$

* Balance Dec. 31, 2014	\$3,364,000
2015 Construction expense	3,100,000
2015 Gross profit	<u>1,100,000</u>
	<u>\$7,564,000</u>

EXERCISE 6-13 (30-35 minutes)

(a) Gross profit recognized in:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>2,500,000</u>	<u>2,500,000</u>	<u>2,500,000</u>
Costs:			
Opening balance of costs	0	1,050,000	1,555,000
Costs incurred during the year	<u>1,050,000</u>	<u>505,000</u>	<u>230,000</u>
Costs to date (given) (B)	1,050,000	1,555,000	1,785,000
Estimated costs to complete	<u>850,000</u>	<u>175,000</u>	<u>0</u>
Estimated total costs (C)	<u>1,900,000</u>	<u>1,730,000</u>	<u>1,785,000</u>
 Percent complete (B/C) *	 55.26%	 89.88%	 100%
 Revenue to date	 1,381,500	 2,247,000	 2,500,000
Less previously recognized revenue	<u>0</u>	<u>(1,381,500)</u>	<u>(2,247,000)</u>
Revenue for the year (D)	<u>1,381,500</u>	<u>865,500</u>	<u>253,000</u>
 Construction costs for the year (E)	 1,050,000	 505,000	 230,000
 Gross profit for the year (D-E)	<u> \$331,500</u>	<u> \$360,500</u>	<u> \$23,000</u>

(*) note percentages have been rounded to 2 decimal places

EXERCISE 6-13 (Continued)

(b)

2014:

Construction in Process	1,050,000	
Materials, Cash, Payables, etc.....		1,050,000
Accounts Receivable	1,000,000	
Billings on Construction in Process		1,000,000
Cash	770,000	
Accounts Receivable		770,000
Construction Expenses.....	1,050,000	
Construction in Process	331,500	
Revenue from Long-Term Contracts		1,381,500

2015:

Construction in Process	505,000	
Materials, Cash, Payables, etc.....		505,000
Accounts Receivable (\$1,900,000 – \$1,000,000)	900,000	
Billings on Construction in Process		900,000
Cash (\$1,810,000 – \$770,000)	1,040,000	
Accounts Receivable		1,040,000
Construction Expenses	505,000	
Construction in Process	360,500	
Revenue from Long-Term Contracts		865,500

EXERCISE 6-13 (Continued)

(b) Continued

2016:

Construction in Process	230,000	
Materials, Cash, Payables, etc.....		230,000
Accounts Receivable (\$2,500,000 – \$1,900,000)	600,000	
Billings on Construction in Process		600,000
Cash (\$2,500,000 – \$1,810,000)	690,000	
Accounts Receivable		690,000
Construction Expenses	230,000	
Construction in Process	23,000	
Revenue from Long-Term Contracts		253,000
Billings on Construction in Process	2,500,000	
Construction in Process		2,500,000

(c) Gross profit recognized in:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Gross profit	\$ –0–	\$ –0–	\$715,000*
	*\$2,500,000 – \$1,785,000		

(d)

Billings on Construction in Process	2,500,000	
Revenue from Long-Term Contracts		2,500,000
Construction Expenses	1,785,000	
Construction in Process		1,785,000

EXERCISE 6-13 (Continued)

(e) If the costs to completion, and therefore the percent complete, cannot be reliably estimated

1. If reporting under current IFRS:

If the outcome cannot be reliably measured, recoverable revenues equal to costs are recognized under IAS 11 and 18 (i.e. zero-profit method). No gross profit would be recorded in 2014 or 2015. The journal entry for 2014 would be as follows:

Construction Expenses	1,050,000
 Revenue from Long-Term Contracts.....	1,050,000

2. If reporting under ASPE:

The completed-contract method is allowed as a default method for long-term contracts under ASPE, where the percent complete cannot be measured. Revenue would only be recorded when the contract is completed.

EXERCISE 6-14 (30-35 minutes)

- (a) **Gross profit recognized in:**
Percentage-of-Completion (Cost-to-Cost Basis)
 (\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$4,200</u>	<u>\$4,200</u>	<u>\$4,200</u>
Costs:			
Opening balance of costs	0	600	2,100
Costs incurred during the year	<u>600</u>	<u>1,500</u>	<u>2,000</u>
Costs to date (B)	600	2,100	4,100
Estimated costs to complete	<u>3,150</u>	<u>2,100</u>	<u>0</u>
Estimated total costs (C)	<u>3,750</u>	<u>4,200</u>	<u>4,100</u>
 Estimated total gross profit	 450	 0	 100
Percent complete (B/C)	16.00%*	50.00%**	100%
 Revenue to date (A x % complete)	 672	 2,100	 4,200
Less previously recognized revenue	<u>0</u>	<u>(672)</u>	<u>(2,100)</u>
Revenue for the year (D)	<u>672</u>	<u>1,428</u>	<u>2,100</u>
 Construction costs for the year (E)	 600	 1,500	 2,000
 Gross profit (loss) for the year (D-E)	 <u>\$72</u>	 <u>\$(72)</u>	 <u>\$100</u>

*\$600,000 ÷ \$3,750,000

**\$2,100,000 ÷ \$4,200,000

EXERCISE 6-14 (Continued)

(b)

2015:

Construction Expenses	1,500,000	
Construction in Process		72,000
Revenue from Long-Term Contracts [from (a)]...		1,428,000

Under the percentage-of-completion method, the increase in costs requires an adjustment in the current period for the excess profit that was recognized on the project in prior years.

(c) Using the Completed-Contract Method:

Gross profit recognized in:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Gross profit (loss)	\$ -0-	\$ -0-	\$100,000

Under the completed-contract method, when cost estimates at the end of the period indicate a loss will result once the contract is completed, that entire loss must be recognized in the current period.

(d)

2016: Entry to close contract:

Billings on Construction in Process	4,200,000	
Revenue from Long-Term Contracts		4,200,000
Construction Expenses	4,100,000	
Construction in Process		4,100,000

EXERCISE 6-15 (15-25 minutes)

(a) Calculation of Gross Profit to Be Recognized under Completed-Contract Method.

No calculation necessary. No gross profit to be recognized prior to completion of contract.

Calculation of Cost of Uncompleted Contract in Excess of Related Billings under Completed-Contract Method.

Costs incurred in 2014	\$3,648,000
Partial billings on contract (30% X \$11,900,000)	<u>(3,570,000)</u>
	<u>\$ 78,000</u>

(b) Calculation of Gross Profit to Be Recognized under Percentage-of-Completion Method.

Total contract price (A)	\$11,900,000
Costs incurred in 2014	\$3,648,000
Estimated total costs (\$3,648,000 + \$4,452,000)	<u>8,100,000</u>
Percent complete (\$3,648/\$8,100) (B)	<u>45.04%</u>
Revenue to be recognized in 2014 (A) x (B)	\$ 5,359,760
Less: Costs incurred in 2014	<u>3,648,000</u>
Gross profit to be recognized in 2014	<u>\$ 1,711,760</u>

Calculation of Costs and Profit on Uncompleted Contract in Excess of Related Billings under Percentage-of-Completion Method.

Costs incurred in 2014	\$3,648,000
Gross profit recognized in 2014 (above)	<u>1,711,760</u>
Total charged to construction-in-process	5,359,760
Partial billings on contract (30% X \$11,900,000)	<u>(3,570,000)</u>
	<u>\$ 1,789,760</u>

EXERCISE 6-16 (15-25 minutes)

Vaneeta Construction Ltd. Partial Income Statement Year Ended December 31, 2014

Revenue from long-term contracts (Project 3)	\$750,000
Construction Expenses (Project 3)	<u>435,000</u>
Gross profit	315,000
Provision for loss (Project 1)*	(160,000)

*Contract costs through 12/31/14	\$2,450,000
Estimated costs to complete	<u>1,070,000</u>
Estimated total costs	3,520,000
Total contract price	<u>3,360,000</u>
Loss recognized in 2014	<u><u>\$ (160,000)</u></u>

Vaneeta Construction Ltd. Partial Balance Sheet December 31, 2014

Current assets:	
Accounts receivable	\$480,000
(\$4,230,000 – \$3,750,000)	
CIP in excess of billings	30,000
Current liabilities:	
Billings in excess of CIP	94,000

Calculations:

	Project 1	Project 2	Project 3
Costs	2,450,000Dr	1,126,000Dr	435,000Dr
Loss / Profit	160,000Cr		315,000Dr
Total CIP:	2,290,000Dr	1,126,000Dr	750,000Dr
Billings	2,260,000Cr	1,220,000Cr	750,000Cr
Net balance:	30,000Dr	94,000Cr	-0-
Classification	Current asset	Current liability	N/A

EXERCISE 6-16 (Continued)

The project with a net debit balance (#1) will be presented as a current asset (CIP in excess of billings). The project with a net credit balance (#2) will be presented as a current liability (Billings in excess of CIP).

EXERCISE 6-17 (30-35 minutes)

(a) 2014:
$$\frac{\$1,750,000}{\$2,800,000} \times \$5,200,000 = \underline{\underline{\$3,250,000}}$$

2015: \$5,200,000 (contract price) minus \$3,250,000 (revenue recognized in 2014) = \$1,950,000

(b) All \$5,200,000 of the contract price is recognized as revenue in 2015.

(c) Using the percentage-of-completion method, the following entries would be made in:

2014:

Construction in Process	1,750,000	
Materials, Cash, Payables, etc.....		1,750,000

Accounts Receivable	3,420,000	
Billings on Construction in Process		3,420,000

Cash	3,350,000	
Accounts Receivable.....		3,350,000

Construction in Process	1,500,000*	
Construction Expenses	1,750,000	
Revenue from Long-Term Contracts [from (a)]		3,250,000

* $[\$5,200,000 - (\$1,750,000 + \$1,050,000)] \times (\$1,750,000 \div \$2,800,000)$

EXERCISE 6-17(Continued)

2015:

Construction in Process	1,315,000	
Materials, Cash, Payables, etc.....		1, 315,000

Accounts Receivable	1,780,000	
Billings on Construction in Process		1, 780,000

Cash	1,850,000	
Accounts Receivable.....		1,850,000

Construction in Process	635,000*	
Construction Expenses	1,315,000	
Revenue from Long-Term Contracts [from (a)]		1,950,000

* \$5,200,000 – \$1,750,000 – \$1,315,000 – \$1,500,000

Billings on Construction in Process.....	5,200,000	
Construction in Process		5,200,000

(d)Using the completed-contract method, the following journal entries would be made

2014:

Construction in Process.....	1,750,000	
Materials, Cash, Payables, etc.....		1,750,000

Accounts Receivable	3,420,000	
Billings on Construction in Process		3,420,000

Cash	3,350,000	
Accounts Receivable.....		3,350,000

EXERCISE 6-17 (Continued)

(d) Continued
2015:

Construction in Process	1,315,000	
Materials, Cash, Payables, etc.....		1, 315,000
Accounts Receivable	1,780,000	
Billings on Construction in Process		1, 780,000
Cash	1,850,000	
Accounts Receivable.....		1,850,000
Billings on Construction in Process	5,200,000	
Revenue from Long-Term Contracts		5,200,000
Construction Expenses	3,065,000	
Construction in Process		3,065,000

EXERCISE 6-18 (30-35 minutes)

(a) Under IFRS, if the outcome cannot be reliably measured, or if it might be difficult to estimate costs to completion, recoverable revenues equal to costs incurred are recognized under IAS 11 and 18 (i.e. zero-profit method). Under the zero-profit method, no gross profit is recorded in 2014. Stephenson incurred construction costs of \$1,574,000 in 2014, of which only \$1,200,000 ($\$1,500,000 \times 80\%$) has been collected in cash. Stephenson would have to ensure that the remaining \$374,000 ($\$1,574,000 - \$1,200,000$) is collectible before recognizing the full \$1,574,000 as recoverable revenue in 2014.

(b) 2014 JE:

Construction in Process	1,574,000	
Materials, Cash, Payables, etc.		1,574,000
Accounts Receivable.....	1,500,000	
Billings on Construction in Process		1,500,000
Cash.....	1,200,000	
Accounts Receivable		1,200,000
Construction Expenses	1,574,000	
Revenue from Long-Term Contracts		1,574,000

EXERCISE 6-18 (Continued)

(c) 2014:

Income Statement

Revenue from long-term contract	\$1,574,000
Construction expense	<u>1,574,000</u>
Gross profit	\$0

Balance Sheet (9/30/14)

Current assets:

Accounts Receivable	\$ 300,000
Inventories—construction in process totalling \$1,574,000 less billings of \$1,500,000	74,000

(d) 2015:

Income Statement

Revenue from long-term contract	\$2,926,000*
Construction Expenses	<u>3,025,000</u>
Gross profit (loss)	(\$99,000)

Balance Sheet (9/30/15)

Current assets:

Accounts Receivable	\$450,000**

*** \$4,500,000 – \$1,574,000**

**** \$4,500,000 X 10%**

Note that the 2015 journal entries would include a credit to the Construction in Process account for the loss provision, thereby reducing the balance of the Construction in Process account. As such, the balance in Construction in Process would not exceed the contract price (or the amount billed to the customer), and the 2015 journal entries would close Construction in Process against Billings on Construction in Process.

EXERCISE 6-18 (Continued)

e) Assuming that Stephenson prepares financial statements in accordance with ASPE:

a) Under ASPE, if the outcome cannot be reliably measured, or if it might be difficult to estimate costs to completion, the accounting would default to the completed-contract method. No gross profit or revenue is recorded in 2014.

b) 2014 JE:

Construction in Process	1,574,000	
Materials, Cash, Payables, etc.		1,574,000
Accounts Receivable.....	1,500,000	
Billings on Construction in Process		1,500,000
Cash.....	1,200,000	
Accounts Receivable		1,200,000

c) 2014:

Balance Sheet (09/30/14)

Current assets:

Accounts Receivable	\$ 300,000
Inventories—construction in process totalling \$1,574,000 less billings of \$1,500,000	74,000

EXERCISE 6-18 (Continued)

d) 2015:

Income Statement

Revenue from long-term contract	\$4,500,000
Construction expense	<u>4,599,000*</u>
Gross profit (loss)	(\$99,000)

Balance Sheet (9/30/15)

Current assets:

Accounts Receivable	\$450,000**

*** \$1,574,000 + \$3,025,000**

**** \$4,500,000 X 10%**

Note that the 2015 journal entries would include a debit to Billings on Construction in Process and a credit to Revenue from Long-Term Contracts for \$4,500,000, and a debit to Construction Expense and a credit to Construction in Process for \$4,599,000, which would close the Construction in Process and Billings accounts respectively.

TIME AND PURPOSE OF PROBLEMS

Problem 6-1 (Time 30-40 minutes)

Purpose—to provide the student with an understanding of measurement and collection uncertainty in the accounting for bundled sales transactions. The question requires a conceptual understanding as well as calculations under alternative scenarios.

Problem 6-2 (Time 50-60 minutes)

Purpose—to provide the student with an understanding of both the percentage-of-completion and completed-contract methods of accounting for long-term construction contracts. The student is required to calculate the estimated gross profit that would be recognized during each year of the construction period under each of the two methods. The preparation of journal entries, including closing the contract under both methods is included in the instructions. Finally the preparation of partial balance sheets and income statements concludes this extended problem. Focus is on the earnings approach. Discussion is also about IFRS vs. PE GAAP.

Problem 6-3 (Time 40-45 minutes)

Purpose—to provide the student with an understanding of both the percentage-of-completion and completed-contract methods of accounting for long-term construction contracts in case where an overall loss is experienced on the contract. The student is required to calculate the estimated gross profit that would be recognized during each year of the construction period under each of the two methods. The preparation of journal entries, including closing the contract under both methods is included in the instructions. Finally the preparation of partial balance sheets and income statements concludes this extended problem. Focus is on the earnings approach.

Problem 6-4 (Time 40-45 minutes)

Purpose—to provide the student with an understanding of both the percentage-of-completion and completed-contract methods of accounting for long-term construction contracts in cases where an overall loss is experienced on the contract. The student is required to calculate the estimated gross profit that would be recognized during each year of the construction period under each of the two methods. The preparation of journal entries, including closing the contract under both methods is included in the instructions. Finally the preparation of partial balance sheets and income statements concludes this extended problem.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 6-5 (Time 25-30 minutes)

Purpose—to provide the student with a problem requiring the calculation of “cost of uncompleted contract in excess of related billings” or “billings on uncompleted contract in excess of related costs” and “profit or loss.” Each of these calculations is required for each year of the three-year contract applying the completed-contract method.

Problem 6-6 (Time 30-40 minutes)

Purpose—to provide the student with a multiple long-term project problem applying the percentage-of-completion method using different assumptions. The student must also deal with overall losses on the construction contract based on the changes in the assumptions in the problem.

Problem 6-7 (Time 35-40 minutes)

Purpose—to provide the student with a long-term construction contract problem that requires the recognition of a loss during an interim year on a contract that is profitable overall. This problem requires application of both the percentage-of-completion method and the completed-contract method to an interim loss situation. Journal entries are also required in this problem. Focus is on the earnings approach.

Problem 6-8 (Time 35-40 minutes)

Purpose—to provide the student with a problem enabling them to apply concepts relating to the percentage-of-completion and the completed-contract methods.

SOLUTIONS TO PROBLEMS

PROBLEM 6-1

(a) Earnings approach versus the contract-based approach

Under the earnings approach, the concern is only about recognizing revenue from the sales contract.

The contract-based approach is concerned about both the recognition of the sales contract and the related revenue. Under the contract-based approach, the contract(s) with the customer are identified, the separate performance obligations in the contract are identified, the transaction price is determined and allocated, and revenue is recognized when a performance obligation is satisfied.

Both methods require that the revenue be measurable and collectible before recognition can occur. However under the contract-based approach, measurability and collectibility are not considered specific recognition criteria; measurement uncertainty is embedded in the calculation of the transaction price, and customer credit risk is measured upon initial recognition of the revenue and recorded in a separate Provision account on the income statement.

PROBLEM 6-1 (Continued)

Under the earnings approach, revenue recognition depends on the company's earnings process. Revenue is recognized in a manner consistent with this earnings process when the company has substantially completed its performance obligations. This approach focuses on measuring revenues and costs and appropriately reflecting these in the income statement. The concept of risks and rewards of ownership is central to the earnings approach since it establishes ownership. Revenue from sale of goods is recognized when ownership transfers or passes to the buyer. Revenue from sale of services is recognized when services are provided.

Under the contract-based approach, revenue is recognized when the entity satisfies a performance obligation, which occurs when the customer obtains control over the good or service. Performance obligations represent what the company has agreed to sell or do under the contract. The concept of control, central to this approach, is based on a legalistic view. Revenue is recorded when legal title passes. This requires less judgment than the risks and rewards test under the earnings approach. Under the earnings approach, an assessment of risks and rewards may show that both the buyer and the seller have some, but not all of the risks and rewards associated with the good or service.

(b) Impact of measurement and collection uncertainty on revenue recognition.

Under both approaches, inability to measure parts of the transaction could delay the recognition of revenue. In general, revenue will not be recognized if the sale is not measurable. Revenue can be recognized if an amount to be received can be quantified and any remaining uncertainties can be estimated (i.e. refunds, future service obligations, etc.).

PROBLEM 6-1 (Continued)

Under the earnings approach, measurability of revenues and related costs is a specific revenue recognition criterion. Under the contract-based approach, measurability of revenues and related costs is a general recognition criterion, with measurement uncertainty embedded in the calculation of the transaction price.

The earnings approach requires assurance that collection of the receivable will ultimately occur (i.e. economic benefits will flow to Soorya) before revenue can be recognized. As long as it is possible to estimate uncollectible amounts, (i.e. based on historical data), the revenue may be booked and the potential uncollectible amount may be accrued. Under the contract-based approach, collectibility is considered a general (not a specific) revenue recognition criteria; customer credit risk is assessed and accounted for separately when revenue is first recognized.

(c) Accounting for the transaction under the earnings approach versus the contract-based approach

Under both approaches, sales involving more than one item must be separated or bifurcated into separate units. Under the earnings approach, after the separate units are determined, the overall price is allocated to each unit using either the relative fair value method (preferred method if the fair value of each unit in the bundle is known) or residual value method (permitted under current IFRS and ASPE if the fair value of the undelivered unit is known). Under the contract-based approach, bundled sales must be bifurcated using the relative fair value method. If the fair value of each unit in the bundle is not known, the company should try to estimate the stand-alone selling price of each unit, and may use the residual value method to do this.

Revenue would then be recorded for each unit when the relevant revenue recognition criteria are met (i.e. under the earnings approach, when risks and rewards are transferred; and under the contract-based approach, when control is transferred).

PROBLEM 6-1 (Continued)

(d)The first step is to allocate the overall fixed price to each unit. The second step is to determine when revenue should be recognized for each unit.

1. In this situation the relative fair value method can be used since the fair value of each unit is known.

Measurement:

	<u>Fair Value</u>	<u>Percent</u>	<u>Price</u>
Hardware & Software	\$650,000	74.29%	\$557,175
Monitoring (50 x 3yrs)	150,000	17.14%	128,550
Maintenance (25 x 3 yrs)	75,000	8.57%	64,275
	<u>\$875,000</u>		<u>\$750,000</u>

Recognition:

Revenue would then be recorded for each unit when the relevant revenue recognition criteria are met:

- For the sale of hardware and software, the criteria would be met upon delivery (for both the earnings and contract-based approaches); accordingly, revenue of \$557,175 could be recognized upon delivery.
- For the monitoring and maintenance service, the \$128,550 and 64,275 would be recognized over the three-year term (for both the earnings and contract-based approaches).

2. Under the earnings approach, the residual value method may be used since the value of undelivered item is known. Under the contract-based approach, Soorya should try to estimate the fair value (stand-alone selling price) of the hardware and software, and the residual value method may be applied to do this.

Measurement:

	<u>Fair Value</u>
Hardware & Software	\$unknown
Monitoring (50 x 3yrs)	150,000
Maintenance (25 x 3 yrs)	75,000
	<u>750,000</u>

PROBLEM 6-1 (Continued)

Using the residual value method, \$525,000 would be allocated to the hardware and software.

Recognition:

Revenue would then be recorded for each unit when the relevant revenue recognition criteria are met:

- **For the sale of hardware and software, the criteria would be met upon delivery (for both the earnings and contract-based approaches); accordingly, revenue of \$525,000 could be recognized upon delivery.**
- **For the monitoring and maintenance service, the \$150,000 and 75,000 would be recognized over the three-year term (for both the earnings and contract-based approaches).**

- 3. Remember that under both approaches, inability to measure parts of the transaction could delay the recognition of revenue. In general, revenue will not be recognized if the sale is not measurable. Revenue can be recognized if an amount to be received can be quantified and any remaining uncertainties can be estimated (i.e. refunds, future service obligations, etc.).**

In this situation, the value of the undelivered components (monitoring and maintenance) is not known. Under these circumstances, we conclude that we cannot value the separate units and we have to treat the transaction as one item. This is because of the risk of manipulating the value of the delivered unit i.e. reporting it for more than it is really worth and recognizing revenue prematurely. The entire revenue of \$750,000 would be recorded over the term of the contract.

PROBLEM 6-1 (Continued)

4. Under both approaches, sales are generally measured at fair value. Since the sale is on credit and the payment term extends beyond 1 year and is non-interest bearing, the receivable should be discounted. The difference between the stated amount in the contract and the discounted amount represents interest that should be separately accounted for on an accrual basis over the 3-year period.

The (discounted) balance represents the fair value of the total revenue for the bundled transaction. Allocation would be made in a similar manner as outlined in scenarios 1, 2, or 3.

(e) Using the residual value method, if the fair value of the monitoring services and the maintenance is determined to be \$100,000 and \$50,000 respectively, \$600,000 would be allocated to the hardware and software; accordingly, revenue of \$600,000 could be recognized upon delivery (instead of \$525,000 based on fair value of similar services provided by competitors). This would result in higher revenues in the year that each system is sold, resulting in higher net income in those years as well. Biased estimates of fair value of each component can have a material effect on revenue recognition, potentially rendering financial statements biased with low quality of earnings. An investor may view the company's revenue recognition policy as aggressive. An investor may be wary of the company's accounting practices and the integrity of the information being presented, and discount the value of the company's shares or forego investing in the company altogether.

PROBLEM 6-2

(a)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$11,000,000</u>	<u>\$11,000,000</u>	<u>\$11,000,000</u>
Costs:			
Opening balance of costs	0	3,060,000	6,435,000
Costs incurred during year	<u>3,060,000</u>	<u>3,375,000</u>	<u>2,865,000</u>
Costs to date (B)	3,060,000	6,435,000	9,300,000
Estimated costs to complete	<u>4,595,000</u>	<u>2,656,000</u>	<u>0</u>
Estimated total costs (C)	<u>7,655,000</u>	<u>9,091,000</u>	<u>9,300,000</u>
 Percent complete (B/C)*	 39.97%	 70.78%	 100%
 Revenue to date (A x % complete)	 4,396,700	 7,785,800	 11,000,000
Less previously recognized revenue		<u>(4,396,700)</u>	<u>(7,785,800)</u>
Revenue for the year (D)	<u>4,396,700</u>	<u>3,389,100</u>	<u>3,214,200</u>
 Construction costs for the year (E)	 <u>3,060,000</u>	 <u>3,375,000</u>	 <u>2,865,000</u>
 Gross profit for the year (D-E)	 <u>\$1,336,700</u>	 <u>\$14,100</u>	 <u>\$349,200</u>

***Percents are rounded to two decimal places.**

PROBLEM 6-2 (Continued)

(b)

2014:

Construction in Process	3,060,000	
Materials, Cash, Payables, etc.....		3,060,000
Accounts Receivable	4,000,000	
Billings on Construction in Process		4,000,000
Cash	3,500,000	
Accounts Receivable.....		3,500,000
Construction in Process	1,336,700	
Construction Expenses	3,060,000	
Revenue from Long-Term Contracts [from (a)]		4,396,700

2015:

Construction in Process	3,375,000	
Materials, Cash, Payables, etc.....		3,375,000
Accounts Receivable	2,300,000	
Billings on Construction in Process		2,300,000
Cash	1,500,000	
Accounts Receivable.....		1,500,000
Construction in Process	14,100	
Construction Expenses	3,375,000	
Revenue from Long-Term Contracts [from (a)]		3,389,100

2016:

Construction in Process	2,865,000	
Materials, Cash, Payables, etc.....		2,865,000
Accounts Receivable	4,700,000	
Billings on Construction in Process		4,700,000

PROBLEM 6-2 (Continued)

(b) continued:

Cash	6,000,000	
Accounts Receivable.....		6,000,000
Construction in Process	349,200	
Construction Expenses	2,865,000	
Revenue from Long-Term Contracts [from (a)]		3,214,200
Billings on Construction in Process	11,000,000	
Construction in Process		11,000,000

(c) and (d)

2014:

Income Statement

Revenue from long-term contract	\$4,396,700
Construction expenses	<u>3,060,000</u>
Gross profit	1,336,700

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable (\$4,000,000-\$3,500,000)	\$ 500,000
Inventories—construction in process totalling \$4,396,700** less billings of \$4,000,000	396,700

** Total cost to date	\$3,060,000
2014 Gross profit	<u>1,336,700</u>
	<u>\$4,396,700</u>

PROBLEM 6-2 (Continued)

(c) and (d) continued:

2015:

Income Statement

Revenue from long-term contract	\$3,389,100
Construction expenses	<u>3,375,000</u>
Gross profit	\$14,100

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable	\$ 1,300,000*
Inventories—construction in process totalling \$7,785,800** less billings of \$6,300,000	1,485,800

$$*\$1,300,000 = \$500,000 + \$2,300,000 - \$1,500,000$$

** Balance Dec. 31, 2014	\$4,396,700
2015 Construction Costs	3,375,000
2015 Gross profit	<u>14,100</u>
	<u>\$7,785,800</u>

(e) In 2014 and 2015, no gross profit would be recognized.

In 2016:

Income Statement

Revenue from long-term contract	\$11,000,000
Construction expenses	<u>9,300,000</u>
Gross profit	<u>\$1,700,000</u>

(f)

Billings on Construction in Process	11,000,000	
Revenue from Long-Term Contracts		11,000,000
Construction expenses	9,300,000	
Construction in Process		9,300,000

PROBLEM 6-2 (Continued)

(g)

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable

\$ 500,000*

*\$500,000 = \$4,000,000 - \$3,500,000

Current liabilities:

Billings of \$4,000,000 in excess of
contract cost \$3,060,000**

940,000

**Total cost to date \$3,060,000

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable

\$ 1,300,000*

Inventories—construction in process

\$6,435,000* less billings of \$6,300,000

135,000

*\$1,300,000 = \$500,000 + \$2,300,000 – \$1,500,000

** Balance Dec. 31, 2014	\$3,060,000
2015 Construction Costs	<u>3,375,000</u>
	<u>\$ 6,435,000</u>

(h) If the costs cannot be reliably estimated

(1) If reporting under current IFRS (IAS 11 and 18):

If the outcome cannot be reliably measured, recoverable revenues equal to costs are recognized (i.e. zero-profit method). No gross profit is recorded in 2014 or 2015. The journal entry for 2014 would be as follows:

Construction Expenses	3,060,000
Revenue from Long-Term Contracts.....	3,060,000

PROBLEM 6-2 (Continued)

(2) If reporting under ASPE:

The completed-contract method is allowed for long-term contracts under ASPE. Revenue would only be recorded when the contract is completed.

- (i) A creditor's analysis of the company's liquidity would include analysis of working capital. The effect of the contract on the company's working capital (current assets less current liabilities) is as follows:

	2014	2015
Percentage-of-Completion method	\$896,700*	\$2,785,800
Completed-Contract method	(\$440,000)**	\$1,435,000

* \$500,000 + \$396,700; \$1,300,000 + \$1,485,800

** \$500,000 - \$940,000; \$1,300,000 + \$135,000

Daisy's liquidity would appear stronger if it uses the percentage-of-completion method, due to earlier recognition of gross profit in construction in process. A creditor should consider the company's revenue recognition policy in its analysis of the company's financial position and liquidity, as well as its profitability.

PROBLEM 6-3

(a)

	2014	2015	2016
Contract price: (A)	<u>\$15,500,000</u>	<u>\$15,500,000</u>	<u>\$15,500,000</u>
Costs:			
Opening balance of costs	0	4,500,000	13,790,000
Costs incurred during year	<u>4,500,000</u>	<u>9,290,000</u>	<u>1,910,000</u>
Costs to date (B)	4,500,000	13,790,000	15,700,000
Estimated costs to complete	<u>10,500,000</u>	<u>1,934,000</u>	<u>0</u>
Estimated total costs (C)	<u>15,000,000</u>	<u>15,724,000</u>	<u>15,700,000</u>
Percent complete (B/C)	30.00%	87.70%	100.0%
Revenue to date (A x % complete)	4,650,000	13,593,500	15,500,000
Less previously recognized revenue	<u> </u>	<u>(4,650,000)</u>	<u>(13,593,500)</u>
Revenue for the year (D)	<u>4,650,000</u>	<u>8,943,500</u>	<u>1,906,500</u>
Construction costs for the year (E)	<u>4,500,000</u>	<u>9,317,500</u>	<u>1,882,500</u>
Gross profit for the year (D-E)	<u>\$150,000</u>	<u>\$(374,000)*</u>	<u>\$24,000</u>

*** 100% of the loss to date is recognized: \$15,500,000 - \$13,790,000 - \$1,934,000 - \$150,000 = (\$374,000)**

\$150,000 - \$374,000 + \$24,000 = \$200,000 final loss.

PROBLEM 6-3 (Continued)

(b)

2014:

Construction in Process	4,500,000	
Materials, Cash, Payables, etc.....		4,500,000
Accounts Receivable	4,600,000	
Billings on Construction in Process		4,600,000
Cash	3,000,000	
Accounts Receivable.....		3,000,000
Construction in Process	150,000	
Construction Expenses	4,500,000	
Revenue from Long-Term Contracts [from (a)]		4,650,000

2015:

Construction in Process	9,290,000	
Materials, Cash, Payables, etc.....		9,290,000
Accounts Receivable(10,000 – 4,600).....	5,400,000	
Billings on Construction in Process		5,400,000
Cash (9,000 – 3,000)	6,000,000	
Accounts Receivable.....		6,000,000
Construction Expenses	9,317,500	
Construction in Process		374,000
Revenue from Long-Term Contracts [from (a)]		8,943,500

Under the percentage-of-completion method, the increase in costs requires an adjustment in the current period for the excess profit that was recognized on the project in prior years.

2016:

Construction in Process	1,910,000	
Materials, Cash, Payables, etc.....		1,910,000
Accounts Receivable	5,500,000	
Billings on Construction in Process		5,500,000

PROBLEM 6-3 (Continued)

(b) continued:

Cash	6,500,000	
Accounts Receivable.....		6,500,000
Construction in Process	24,000	
Construction Expenses	1,882,500	
Revenue from Long-Term Contracts [from (a)]		1,906,500
Billings on Construction in Process	15,500,000	
Construction in Process		15,500,000

(c) and (d)

2014:

Income Statement

Revenue from long-term contract	\$4,650,000
Construction Expenses	<u>4,500,000</u>
Gross profit	\$150,000

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable (\$4,600,000 – \$3,000,000)	\$ 1,600,000
Inventories—construction in process totalling	
\$4,650,000** less billings of \$4,600,000	50,000

** Total cost to date	\$4,500,000
2014 Gross profit	<u>150,000</u>
	<u>\$4,650,000</u>

PROBLEM 6-3 (Continued)

(c) and (d) continued:

2015:

Income Statement

Revenue from long-term contract	\$8,943.500
Construction Expenses	<u>9,317,500</u>
Gross profit (loss)	(\$374,000)

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable (10,000,000-9,000,000)	\$1,000,000
Inventories—construction in process totalling \$13,566,000** less billings of \$10,000,000	3,566,000

** Balance Dec. 31, 2014	\$4,650,000
2015 Construction Costs	9,290,000
2015 Gross profit (loss)	<u>(374,000)</u>
	<u>\$13,566,000</u>

(e) In 2014, no gross profit or loss would be recognized.

In 2015, the expected contract loss of \$224,000 is recognized and recorded as follows:

Loss from Long-Term Contracts.....	224,000
Construction in Process	224,000

Under the completed-contract method, when cost estimates at the end of the period indicate a loss will result once the contract is completed, that entire loss must be recognized in the current period.

PROBLEM 6-3 (Continued)

In 2015:

Income Statement

Estimated excess costs on long-term contract **\$ 224,000**

In 2016:

Income Statement

Revenue from long-term contracts	\$15,500,000
Construction expenses	<u>15,476,000</u>
Gross profit	<u><u>\$24,000</u></u>

Or

Revenue from long-term contracts	\$15,500,000
Construction expenses	<u>15,700,000</u>
Loss on contract	200,000
Less loss recognized in 2015	<u>(224,000)</u>
Gross profit recognized in 2016	<u><u>\$ 24,000</u></u>

(f)

Billings on Construction in Process	15,500,000
Revenue from Long-Term Contracts	15,500,000
Construction Expenses	15,476,000
Construction in Process	15,476,000

(g)

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable	\$ 1,600,000

Current liabilities:

Billings of \$4,600,000 in excess of contract cost \$4,500,000*	100,000

***Total cost to date \$4,500,000**

PROBLEM 6-3 (Continued)

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable **\$ 1,000,000**

Inventories—construction in process totalling
\$13,566,000 less billings of \$10,000,000** **3,566,000**

** Balance Dec. 31, 2014	\$4,500,000
2014 Construction Costs	9,290,000
Loss to date accrued	<u>(224,000)</u>
	<u>\$ 13,566,000</u>

PROBLEM 6-3 (Continued)

(h) If in 2015, estimated cost to complete construction is \$1,700,000, then estimated total costs of the contract would be \$15,490,000 (\$13,790,000 + \$1,700,000), which would be less than the \$15,500,000 contract price. The contract would be accounted for as a profitable one in 2015, and no loss would be shown in the financial statements. A potential investor who bases their investment decision on information in the 2015 financial statements may not be aware that the construction contract is actually an unprofitable contract, and may base their decision to invest in the company on this information.

The company's estimate of costs to complete the contract must be faithfully representative and unbiased. Presenting biased estimates of the costs to complete construction to avoid disclosing an unprofitable contract is unethical because the resulting financial statements are biased and misleading. The results of unethical behaviour can include severe loss of reputation, civil action against the company, and criminal action for fraudulent behaviour.

PROBLEM 6-4

(a)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>9,500,000</u>	<u>9,500,000</u>	<u>9,500,000</u>
Costs:			
Opening balance of costs	0	3,825,000	8,500,000
Costs incurred during year	<u>3,825,000</u>	<u>4,675,000</u>	<u>1,300,000</u>
Costs to date (B)	3,825,000	8,500,000	9,800,000
Estimated costs to complete	<u>4,675,000</u>	<u>1,270,000</u>	<u>0</u>
Estimated total costs (C)	<u>8,500,000</u>	<u>9,770,000</u>	<u>9,800,000</u>
 Percent complete (B/C)	 45.00%	 87.00%	 100.0%
 Revenue to date (A x % complete)	 4,275,000	 8,265,000	 9,500,000
Less previously recognized revenue		<u>(4,275,000)</u>	<u>(8,265,000)</u>
Revenue for the year (D)	<u>4,275,000</u>	<u>3,990,000</u>	<u>1,235,000</u>
 Construction costs for the year (E)	 <u>3,825,000</u>	 <u>4,710,000</u>	 <u>1,265,000</u>
 Gross profit for the year (D-E)	 <u>\$450,000</u>	 <u>\$(720,000)*</u>	 <u>\$(30,000)**</u>

***100% of the expected loss is recognized: \$9,500,000 - \$9,770,000 - \$450,000 = (\$720,000)**

**** \$450,000 - \$720,000 - \$30,000 = (\$300,000) final loss**

PROBLEM 6-4 (Continued)

(b)

2014:

Construction in Process	3,825,000	
Materials, Cash, Payables, etc.....		3,825,000
Accounts Receivable	3,500,000	
Billings on Construction in Process		3,500,000
Cash	3,100,000	
Accounts Receivable.....		3,100,000
Construction in Process	450,000	
Construction Expenses	3,825,000	
Revenue from Long-Term Contracts [from (a)]		4,275,000

2015:

Construction in Process	4,675,000	
Materials, Cash, Payables, etc.....		4,675,000
Accounts Receivable (7,600 – 3,500)	4,100,000	
Billings on Construction in Process		4,100,000
Cash (7,250 – 3,100)	4,150,000	
Accounts Receivable.....		4,150,000
Construction Expenses	4,710,000	
Construction in Process		720,000
Revenue from Long-Term Contracts [from (a)]		3,990,000

2016:

Construction in Process	1,300,000	
Materials, Cash, Payables, etc.....		1,300,000
Accounts Receivable (9,500 – 7,600)	1,900,000	
Billings on Construction in Process		1,900,000

PROBLEM 6-4 (Continued)

(b) continued:

Cash (9,350 – 7,250)	2,100,000	
Accounts Receivable.....		2,100,000
Construction Expenses	1,265,000	
Construction in Process.		30,000
Revenue from Long-Term Contracts [from (a)]		1,235,000
Billings on Construction in Process	9,500,000	
Construction in Process		9,500,000

(c) and (d)

2014:

Income Statement

Revenue from long-term contract	\$4,275,000
Construction expenses	<u>3,825,000</u>
Gross profit	\$450,000

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable (3,500 – 3,100)	\$ 400,000
Inventories—construction in process totalling \$4,275,000** less billings of \$3,500,000	775,000

** Total cost to date	\$3,825,000
2014 Gross profit	<u>450,000</u>
	<u>\$4,275,000</u>

PROBLEM 6-4 (Continued)

(c) and (d) continued:

2015:

Income Statement

Revenue from long-term contract	\$3,990,000
Construction expenses	<u>4,710,000</u>
Gross profit (loss)	(\$720,000)

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable (400 + 4,100 – 4,150)	\$ 350,000
Inventories—construction in process totalling \$8,230,000* less billings of \$7,600,000	630,000

* Balance Dec. 31, 2014	\$4,275,000
2015 Construction Costs	4,675,000
2015 Gross profit	<u>(720,000)</u>
	<u>\$8,230,000</u>

2016:

Income Statement:

Revenue from long-term contract	\$1,235,000
Construction expenses	<u>1,265,000</u>
Gross profit (loss)	(\$30,000)

(e) In 2014, no gross profit would be recognized.

In 2015 the contract loss of \$270,000 is recognized and recorded as follows:

Loss from Long-term Contracts.....	270,000	
Construction in Process		270,000

PROBLEM 6-4 (Continued)

In 2016:

Income Statement

Revenue from long-term contracts	\$9,500,000
Construction expenses	<u>9,530,000 *</u>
Gross profit (loss)	<u><u>\$(30,000)</u></u>
*($\$9,800,000 + \$450,000 - \$720,000$)	

(f)

Billings on Construction in Process	9,500,000	
Revenue from Long-Term Contracts ..		9,500,000
Construction Expenses	9,530,000	
Construction in Process		9,530,000

(g)

Balance Sheet (12/31/14)

Current assets:

Accounts Receivable	\$ 400,000
Inventories—construction in process totalling \$3,825,000 less billings of \$3,500,000	325,000

Balance Sheet (12/31/15)

Current assets:

Accounts Receivable	\$ 350,000
Inventories—construction in process totalling \$8,230,000** less billings of \$7,600,000	630,000

** Balance Dec. 31, 2014	\$3,825,000
2015 Construction Costs	4,675,000
Loss to date accrued	<u>(270,000)</u>
	<u><u>\$8,230,000</u></u>

PROBLEM 6-4 (Continued)

(h) If in 2015, estimated cost to complete construction is \$400,000, then estimated total costs of the contract would be \$8,900,000 (\$3,825,000 + \$4,675,000 + \$400,000), which would be less than the \$9,500,000 contract price. The contract would be accounted for as a profitable one in 2015, and no loss would be shown in the financial statements. A potential investor who bases their investment decision on information in the 2015 financial statements may not be aware that the construction contract is actually an unprofitable contract, and may base their decision to invest in the company on this information.

The company's estimate of costs to complete the contract must be faithfully representative and unbiased. Presenting biased estimates of the costs to complete construction to avoid disclosing an unprofitable contract is unethical because the resulting financial statements are biased and misleading. The results of unethical behaviour can include severe loss of reputation, civil action against the company, and criminal action for fraudulent behaviour.

PROBLEM 6-5

(a)

**Unique Construction Inc.
Calculation of Costs of Uncompleted Contract
In Excess of Related Billings or
(Billings on Uncompleted Contract
In Excess of Related Costs)
(\$000 omitted)**

	<u>2014</u>	<u>2015</u>	<u>2016*</u>
Construction costs to date	\$1,140	\$4,055	
Accrued loss to date on contract[see part (b)]	<u> </u>	<u>(200)</u>	
Balance of construction in process	1,140	3,855	
Billings on construction contract	<u>1,500</u>	<u>2,500</u>	
Billings in excess of contract costs	<u><u>(\$360)</u></u>		
Contract costs and accrued losses in excess of billings		<u><u>\$1,355</u></u>	

*** contract is completed, construction costs have been closed**

PROBLEM 6-5 (Continued)

(b) Unique Construction Inc.
Calculation of Profit or Loss to Be Recognized
On Uncompleted Contract
(\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract Price: (A)	<u>\$5,500</u>	<u>\$5,500</u>	<u>\$5,500</u>
Costs:			
Opening balance of costs	0	1,140	4,055
Costs incurred during the year	<u>1,140</u>	<u>2,915</u>	<u>1,745</u>
Costs to date (B)	1,140	4,055	5,800
Estimated costs to complete	<u>2,660</u>	<u>1,645</u>	<u>0</u>
Estimated total costs (C)	<u>3,800</u>	<u>5,700</u>	<u>5,800</u>
 Estimated total gross profit	 1,700	 (200)	 (300)
 Percent complete (B/C)	 30%	 71.14%	 100%
 Gross profit (loss) recognized	 0*	 (200)	 (300)
Gross profit (loss) recognized in previous years	<u>0</u>	<u>0</u>	<u>200</u>
Gross profit (loss) recognized current year	<u><u>\$0</u></u>	<u><u>(\$200)</u></u>	<u><u>(\$100)</u></u>

* The completed-contract method recognizes income only when the contract is completed, or substantially so.

(c) Construction companies that use the percentage-of-completion method to account for long term construction contracts also recalculate the results of their contracts each fiscal year using the completed-contract method. This is the case since the Income Tax Act allows the reporting of construction revenue based on the completed-contract method. Consequently, the company gets a tax postponement by reporting gross profit in the last year of the construction instead of every year during construction.

PROBLEM 6-6

- (a) **The completed-contract method of revenue recognition recognizes income only upon completion of a project or shipment of a product. All associated costs are expensed at the point of sale, and there are no interim charges or credits to income, unless it is determined that the project will experience an overall loss, in which case the loss is accrued as soon as it is likely and measurable. Completed-contract revenue recognition is used for long-term projects when estimates of revenue and costs are not reliable.**

The percentage-of-completion method of revenue recognition recognizes income and associated costs in each accounting period, based upon progress. This method is preferred for long-term projects when estimates of revenues and costs are dependable. Under the percentage-of-completion method, the current status of uncompleted contracts is reflected on the financial statements.

PROBLEM 6-6 (Continued)

(b) 1.

Percentage-of-Completion (Cost-to-Cost Basis) (\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$10,000</u>
Costs:			
Opening balance of costs	0	2,010	6,025
Costs incurred during the year	<u>2,010</u>	<u>4,015</u>	<u>1,675</u>
Costs to date (B)	2,010	6,025	7,700
Estimated costs to complete	<u>5,690</u>	<u>1,675</u>	<u>0</u>
Estimated total costs (C)	<u>7,700</u>	<u>7,700</u>	<u>7,700</u>
Percent complete (B/C)	26.10%	78.25%	100.00%
Revenue to date (A x % complete)	2,610	7,825	10,000
Less previously recognized revenue		<u>(2,610)</u>	<u>(7,825)</u>
Revenue for the year (D)	<u>2,610</u>	<u>5,215</u>	<u>2,175</u>
Construction costs for the year (E)	<u>2,010</u>	<u>4,015</u>	<u>1,675</u>
Gross profit for the year (D-E)	<u>\$600</u>	<u>\$1,200</u>	<u>\$500</u>

PROBLEM 6-6 (Continued)

2. Assuming the same facts as in instruction (b) (1), but that cost overruns of \$1,200,000 were experienced in the year 2014, Jupiter's long-term construction contract revenue and gross profit would be calculated as follows:

Percentage-of-Completion (Cost-to-Cost Basis) (\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$10,000</u>
Costs:			
Opening balance of costs	0	3,210	7,225
Costs incurred during the year	<u>3,210 *</u>	<u>4,015</u>	<u>1,675</u>
Costs to date (B)	3,210	7,225	8,900
Estimated costs to complete	<u>5,690</u>	<u>1,675</u>	<u>0</u>
Estimated total costs (C)	<u>8,900</u>	<u>8,900</u>	<u>8,900</u>
Percent complete (B/C)	36.07%	81.18%	100.00%
Revenue to date (A x % complete)	3,607	8,118	10,000
Less previously recognized revenue		<u>(3,607)</u>	<u>(8,118)</u>
Revenue for the year (D)	<u>3,607</u>	<u>4,511</u>	<u>1,882</u>
Construction costs for the year (E)	<u>3,210</u>	<u>4,015</u>	<u>1,675</u>
Gross profit for the year (D-E)	<u>\$397</u>	<u>\$496</u>	<u>\$207</u>

* \$2,010 + \$1,200 (cost overrun)

PROBLEM 6-6 (Continued)

3. Assuming the same facts as in instructions (b)(1) and (b)(2), but that additional cost overruns of \$1,240,000 are experienced in the year 2015, Jupiter's long-term construction contract revenue and gross profit are calculated as follows:

Percentage-of-Completion (Cost-to-Cost Basis) (\$000 omitted)

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$10,000</u>
Costs:			
Opening balance of costs	0	3,210	8,465
Costs incurred during the year	<u>3,210</u>	<u>5,255 *</u>	<u>1,675</u>
Costs to date (B)	3,210	8,465	10,140
Estimated costs to complete	<u>5,690</u>	<u>1,675</u>	<u>0</u>
Estimated total costs (C)	<u>8,900</u>	<u>10,140</u>	<u>10,140</u>
Estimated total gross profit (loss)	1,100	(140)	(140)
Percent complete (B/C)	36.07%	83.48%	100.00%
Revenue to date (A x % complete)	3,607	8,348	10,000
Less previously recognized revenue		<u>(3,607)</u>	<u>(8,348)</u>
Revenue for the year (D)	<u>3,607</u>	<u>4,741</u>	<u>1,652</u>
Construction costs for the year (E)	<u>3,210</u>	<u>5,278 ***</u>	<u>1,652</u>
Gross profit for the year (D-E)	<u>\$397</u>	<u>\$(537)</u>	<u>\$0</u>

* \$4,015 + \$1,240

** When there is a projected overall loss at any time, it must be recognized in full in the period in which a loss on the contract appears probable

*** Revenue \$4,741 and negative gross profit \$537

PROBLEM 6-7

**(a) Calculation of Recognizable Profit/Loss
Percentage-of-Completion Method
(\$000 omitted)**

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Contract price: (A)	<u>\$9,400</u>	<u>\$9,400</u>	<u>\$9,400</u>
Costs:			
Opening balance of costs	0	1,600	6,600
Costs incurred during the year	<u>1,600</u>	<u>5,000</u>	<u>2,200</u>
Costs to date (B)	<u>1,600</u>	<u>6,600</u>	<u>8,800</u>
Estimated costs to complete	<u>4,800</u>	<u>2,084</u>	<u>0</u>
Estimated total costs (C)	<u>6,400</u>	<u>8,684</u>	<u>8,800</u>
Percent complete (A x % complete)	25.00%	76.00%	100.00%
Revenue to date	2,350	7,144	9,400
Less previously recognized revenue		<u>(2,350)</u>	<u>(7,144)</u>
Revenue for the year (D)	<u>2,350</u>	<u>4,794</u>	<u>2,256</u>
Construction costs for the year (E)	<u>1,600</u>	<u>5,000</u>	<u>2,200</u>
Gross profit for the year (D-E)	<u>\$750</u>	<u>\$(206)</u>	<u>\$56</u>

PROBLEM 6-7 (Continued)

(b) Calculation of Recognizable Profit/Loss Completed-Contract Method

2014—NONE

2015—NONE

	<u>2016</u>	
Total revenue recognized		\$9,400,000
Total costs incurred		<u>8,800,000</u>
Profit recognized in 2016		<u>\$ 600,000</u>

(c)

2014:

Construction in Process	1,600,000	
Materials, Cash, Payables, etc.....		1,600,000
Accounts Receivable	2,000,000	
Billings on Construction in Process		2,000,000
Cash	1,950,000	
Accounts Receivable.....		1,950,000

2015:

Construction in Process	5,000,000	
Materials, Cash, Payables, etc.....		5,000,000
Accounts Receivable	5,100,000	
Billings on Construction in Process		5,100,000
Cash	4,900,000	
Accounts Receivable.....		4,900,000

PROBLEM 6-7 (Continued)

2016:

Construction in Process	2,200,000	
Materials, Cash, Payables, etc.....		2,200,000
Accounts Receivable	2,300,000	
Billings on Construction in Process		2,300,000
Cash	2,550,000	
Accounts Receivable.....		2,550,000
Billings on Construction in Process	9,400,000	
Revenue from Long-Term Contracts		9,400,000
Construction Expenses	8,800,000	
Construction in Process		8,800,000

PROBLEM 6-8

**(a) Schedule to Calculate Gross Profit for 2014
(\$000 omitted)**

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>Total</u>
Contract Price: (A)	\$300	\$350	\$280	\$200	\$240	
Costs:						
Costs incurred to date (B)	248	67.8	186	123	185	
Estimated costs to complete	67	271.2	0	87	15	
Estimated total costs (C)	315	339.0	186	210	200	
Estimated total gross profit (loss)	(15)	11	94	(10)	40	
Percent complete (B/C)	79%	20%	100%	59%	92.5%	
Gross profit (loss) recognized	(\$15)*	\$2.2	\$94	(\$10) *	\$37	\$108.2
Revenue (A x % complete))	\$237	\$70	\$280	\$118	\$222	\$927

* all of the losses are recognized when measurable

**Schedule to Calculate Contract Costs
and Recognized Profit in Excess of Billings
(\$000 omitted)**

	<u>A</u>	<u>B</u>	<u>C*</u>	<u>D</u>	<u>E</u>	<u>Total</u>
Costs incurred to date	\$248	\$67.8		\$123	\$185	\$623.8
Accrued profit (loss) to date on contract	(15)	2.2		(10)	37	14.2
Balance construction in process	233	70		113	222	\$638.0
Billings on construction contract	200	110		35	205	
Contract costs and gross profit in excess of billings	\$33			\$78	\$17	
Billings in excess of contract costs and gross profit		(\$40)				

*Contract is complete, construction costs have been closed

PROBLEM 6-8 (Continued)

(b) Partial Income Statement

Revenue from long-term contracts	\$927,000
Construction Expenses	<u>818,800</u>
Gross profit	<u>\$108,200</u>

Refer to totals of costs plus gross profit or less losses in second schedule part (a)

Partial Balance Sheet

Current assets:	
Accounts receivable	\$ 65,000
(\$830,000 – \$765,000)	
Inventories (below)	
Construction in process	\$568,000
Less: Billings	<u>440,000</u>
Unbilled contract costs and recognized profit in excess of billings	128,000
Current liabilities:	
Billings (\$110,000) in excess of costs and recognized profit (\$70,000)- Project B	\$ 40,000

(\$000 omitted)

	<u>A</u>	<u>D</u>	<u>E</u>	<u>Total</u>
Construction In process	\$248	\$123	\$185	\$556
Accrued loss to date on contract	<u>(15)</u>	<u>(10)</u>	<u>37</u>	<u>12</u>
Balance construction in process	233	113	222	568
Billings on construction contract	<u>200</u>	<u>35</u>	<u>205</u>	<u>440</u>
Contract costs in excess of billings	<u>\$33</u>	<u>\$78</u>	<u>\$17</u>	<u>\$128</u>

PROBLEM 6-8 (Continued)

(c) Schedule to Calculate Gross Profit for 2014 (\$000 omitted)

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Contract Price:	\$300	\$350	\$280	\$200	\$240
Costs:					
Costs incurred to date	248	67.8	186	123	185
Estimated costs to complete	67	271.2	0	87	15
Estimated total costs	<u>315</u>	<u>339.0</u>	<u>186</u>	<u>210</u>	<u>200</u>
Estimated total gross profit (loss)	(15)	11	94	(10)	40
Percent complete	<u>79%</u>	<u>20%</u>	<u>100%</u>	<u>59%</u>	<u>92.5%</u>
Gross profit (loss) recognized	<u>(\$15)</u>		<u>\$94</u>	<u>(\$10)</u>	

Schedule to Calculate Contract Costs in Excess of Billings and Billings in Excess of Costs (\$000 omitted)

	<u>A</u>	<u>B</u>	<u>C*</u>	<u>D</u>	<u>E</u>
Construction In process	\$248	\$67.8		\$123	\$185
Accrued loss to date on contract	<u>(15)</u>	<u>0.0</u>		<u>(10)</u>	<u>0</u>
Balance construction in process	233	67.8		113	185
Billings on construction contract	<u>200</u>	<u>110</u>		<u>35</u>	<u>205</u>
Contract costs in excess of billings	<u>\$33</u>			<u>\$78</u>	
Billings in excess of contract costs and accrued losses		<u>(\$42.2)</u>			<u>(\$20)</u>

*Contract is complete, construction costs have been closed

PROBLEM 6-8 (Continued)

- (d) The principal advantage of the completed-contract method is that it reports revenue based on the final results and not on estimates made throughout the construction period. However, the disadvantage of using this method is that for contracts, which extend more than one accounting period, income recognition is distorted. For example, in this exercise Ashely Corp. would recognize \$39,200 less gross profit using the completed-contract method than if it was using the percentage-of-completion method (\$108,200-\$69,000). This difference exists because the only project completed at the end of 2014 was project C and so that is the only project from which Ashely may recognize revenue and gross profit. Therefore, even though a portion of the work was completed on the other projects (B and E), no revenues or gross profit can be recognized until those projects are completed.

On the other hand, the percentage-of-completion method does recognize revenue and gross profit before the completion of a project. If Ashely can determine reliable estimates of its progress and meets the other conditions for this method, Ashely can recognize revenues as the work progresses. The use of this method provides financial statement users with a more current picture of the results of the company's operations; however, problems may occur if the estimates are poor. If revised estimates, or even rising costs, show that a project will result in a loss, the company must reverse gross profit previously recognized for that project. Thus, it is possible that the financial statements may present a good picture one year and the next year present a picture that is not as good because of the change in estimate treatment.

The end results will be the same under either method and so the difference is simply one of timing. Therefore, if a company can determine reliable estimates of its progress towards completion and meets the required conditions, the

PROBLEM 6-8 (Continued)

percentage-of-completion method is preferred. Otherwise, the completed-contract method is more appropriate.

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

CA6-1 CUTTING EDGE

Overview

The company is fairly new and is looking to obtain a bank loan to update its facility. Therefore, the bank will be a user and will likely want GAAP financial statements as they are more reliable and relevant. The bank will focus on the current ratio and debt to equity ratio in determining whether to grant the loan and therefore there is pressure to show improved ratios. As controller, the viability of the plan as well as the impact on financial statements must be assessed. As a private entity, the company may choose to use IFRS or ASPE. As per the questions, ASPE is a constraint.

Analysis and recommendations

Issue: Revenue recognition

Recognize revenues as magazines are delivered	Do not recognize revenues until the refund period is over
- Receipts based on subscriptions should be credited to unearned revenue. As each monthly edition is distributed, the unearned revenue is reduced (Dr.) and earned revenue is recognized (Cr.). - At this point, the company will have earned the revenues and the risk and rewards will have passed as the magazines have been completed and delivered. - Cutting Edge is expecting a 25% return rate and the refund offer will not expire until the new subscriptions expire. The transaction is based on competitor information and is therefore measurable.	- A problem results because of the unqualified guarantee for a full refund. - Some publishing companies experience such a high rate of returns that they find it necessary to postpone revenue recognition until the return privilege has substantially expired. In these cases, the transaction is not measurable. - The company expects 25% returns but they have no history and therefore no way of confirming this upfront. - The cost of the magazines would be recognized when shipped. - Other.

- To the extent that the 25% estimate of cancellation is reasonable, Cutting Edge can recognize revenue when the edition is distributed and record a related reduction for expected returns and cancellations.	
- In addition, the excess cost of the world atlas (over the \$2) would be expensed as incurred as a selling expense. An estimate needs to be made for the excess cost of the atlas over the \$2 price (this may be difficult since there is no past history). - An alternative to this treatment is to treat as a bundled sale with part of the revenues relating to the “sale” of the atlases deferred until the atlases are delivered. This is dependent on whether the transaction is seen as a selling expense or a multiple element sale. The company would have to bifurcate the sales price and allocate a reasonable amount of the unearned revenues to the atlases. - The current ratio (Current Assets/Current Liabilities) will change, but not in the direction Pang thinks. As subscriptions are obtained, current assets (cash or accounts receivable) will increase and current liabilities (unearned revenue) will increase by the same amount. In addition, the liabilities for estimated premium claims outstanding and the allowance for estimated sales returns will increase with no change in current assets. Consequently, the current ratio will decrease rather than increase as proposed. As the revenue is earned, these ratios will become more favourable. Similarly, the debt to equity ratio will not be decreased due to the increase in liabilities. - Other.	

CA6-1 (Continued)

In conclusion, it might be argued that the transaction is measurable and the risks and rewards of ownership have passed to the customer. Consequently, revenue should be recognized as each edition is distributed.

Issue: There is an additional revenue recognition issue relating to the large new customer

Recognize the revenues for the large new customer	Do not recognize
- The magazine has been produced and printed and is ready to be shipped. Therefore the company has earned the revenues. - It is the customer who has asked that the magazines not be shipped and this is presumably due to some valid business reason. - Other.	- The sales are to a new customer and therefore, collectibility may be an issue. - In addition, the magazines have not yet been shipped and therefore the risks and rewards may still rest with the company. The hold period seems a bit long since the magazine will be dated after one month. - The delivery schedule does not appear to be firm and also, it is unclear as to whether the magazines are segregated from the rest of the company's inventory. - Other.

In conclusion, even though the recognition of revenues would improve the current ratio as well as the debt to equity ratio, this recognition of the revenue might be a bit aggressive as the magazines have not yet been delivered. The company must prove that the magazines are being held for a valid business reason, that a fixed delivery date is planned and that the inventory is segregated. They then may be able to argue for recognizing revenues.

CA 6-2 NIMBLE HEALTH AND RACQUET CLUB

Overview

The company financial statements will be used to determine bonus payments and therefore, net income is important. The controller may have a bias to maximize net income. The controller and assistant controller disagree on the treatment of several items. Care should be taken to ensure that the statements are not biased.

Given that the company is public, GAAP = IFRS, and this is a constraint.

NOTE – the accounting issues are fairly straightforward in this case. The real issue here is the ethical dilemma.

Analysis and recommendations

Issue: Annual fees – revenue recognition

The membership fees, which are paid in advance and sold with a money-back guarantee, should be recognized as revenue over the life of the membership. Each month, NHRC earns one-twelfth of the revenue. This results in a liability for the unearned and potentially refundable portion of the fee. For those membership fees that are financed, interest is recognized as time passes at the rate of 15 percent per annum.

Court rental fees should be recorded as revenue as the members use the courts.

Although the controller would prefer immediate recognition, there is no compelling support for this.

Issue: Coupons

Revenue from the sale of coupon books should be recorded when the coupons are redeemed; i.e., when members attend aerobics classes. At year-end, an adjustment should be made to recognize the revenue from unused coupons that have expired. Once the company builds a bit of history, it may take a percentage of the estimated unredeemable coupon revenue into income over the year, in order to estimate what percent will not be redeemed in the future.

CA 6-2 (Continued)

Since the company currently has no history, GAAP supports recognition of revenue as earned and the rest when the coupons expire. There is no compelling support for earlier recognition.

Issue: Revenue recognition from the machine sales

Since NHRC has not provided any service when the down payment for equipment is received. The down payment should be treated as a current liability until delivery of the equipment is made.

This is a bundled sale. The company is selling the machine plus maintenance services. Should the bundle be bifurcated? The machine has stand-alone value to the customer as it can be used without the maintenance contract. It is questionable whether there is objective and reliable evidence of the value of the maintenance services as the company is just getting into this part of the business and does not otherwise sell the maintenance service separately. However, the manufacturer or industry association may be able to provide some statistics on this. The equipment manufacturer would likely provide a conservative estimate for costs that could be relied on which could then be grossed up to a retail value of the maintenance service. Ideally, this sale should be bifurcated assuming the measurement uncertainty issue can be resolved.

Since NHRC expects to incur costs under the guarantee and these costs can be estimated (see above), an amount equal to the proportion of the total revenue that is allocated to the maintenance services should be recognized as unearned in the accounting period in which the equipment sale is recorded. There is no basis for earlier recognition. This amount should be at least equal to the expected costs (4% of the total charge for the equipment), otherwise the company would be recognizing profits now on the sale of the equipment and deferring losses to future years.

Magda Bambenek may wish to speak to Hogan again regarding the GAAP violations to ensure that she understands his position. In order to resolve the situation, Bambenek should follow the policies established by NHRC for the resolution of ethical conflicts. If the company does not have such a policy or the policy does not resolve the conflict, Bambenek should consider the following course of action:

CA 6-2 (Continued)

1. Since her immediate supervisor is involved in the situation, Bambenek should take the issue to the next higher managerial level. Bambenek need not inform Hogan of this step because of his involvement.
2. If there is no resolution, Bambenek should continue to present the problem to successively higher levels of internal review; i.e., audit committee, Board of Directors.
3. Bambenek should have a confidential discussion of her options with an objective advisor to obtain a clearer understanding of possible courses of action.
4. After exhausting all levels of internal review without resolution, Bambenek may have no other recourse than to resign from her position. Upon doing so, she should submit an informative memorandum to an appropriate representative of the organization.
5. Bambenek should not communicate with individuals outside of the organization about this situation unless legally prescribed to do so.

IC 6-1 TREETOP PHARMACEUTICALS

Note that this case includes some issues where the technical material will be covered in more detail later on in the text. The case may be used to encourage students to do some advanced research on their own or the students might be encouraged to use basic analysis using the conceptual framework. Issues may be discussed in more general terms including whether to recognize debt or liabilities, how to measure assets and whether to disclose a problem or not. The solution below takes the latter route.

Overview

The company is experiencing cash flow difficulties (as evidenced by increased competition, inability to pay bonuses, and rapid expansion) and is currently negotiating to increase its line of credit. The bank has concerns about its liquidity and solvency and will likely focus on cash flows, current ratio and debt to equity ratio in deciding whether to lend more money. Any issues that affect these numbers are therefore important. The auditor would like to assess audit risk and therefore will want to look at controversial financial reporting issues. Since the company is barely breaking even, anything that affects net income will be considered material. The CFO will be biased to show higher net income since he is worried that the share price will fall. He will also want to project a more stable cash flow picture in order to maximize stock prices for management stock options. The case implies that the entity is a public company (worried about the share prices falling) and therefore IFRS is a constraint. The main users will want more relevant and reliable information.

Analysis and recommendations

Issue: Lawsuit

This is likely the most significant issue. This is a very large potential liability (claim equal to prior year revenues). Since the company's lawyers cannot estimate the likely loss and even though they fear that the company will lose, note disclosure must be made (no impact on net income or key ratios). However, every attempt should be made to try to estimate the loss. The company will not, however, want to overemphasize the problem. The existence of this lawsuit could result in a going concern problem – information that the auditor and banker will definitely find to be relevant. The company must decide whether to include a note disclosure in the financial statements about its status as a going concern – a tough decision.

IC 6-1 (Continued)

Issue: How to account for the funding from DDC

Revenue	Liability
- The funding represents revenues for development of drugs and distribution systems. It is measurable and collectible since already received. - The money has largely been spent already and therefore, it might be argued that it has been earned in providing these services. - The 2% royalty would be paid to DDC who would presumably own the drugs that TP was helping to develop. - Other.	- The transaction represents a source of funding to the company. The company is short of cash and cannot afford to show more debt on the balance sheet. This funding represents a more creative source of cash. - It would appear that the company has an obligation to repay the money via the 2% royalty payment. Even though the legal form is that the payment represents a royalty, the economic substance is that this represents an obligation to repay the funding. - Why would DDC otherwise fund distribution channels? Is this just a type of loan that TP uses to alleviate cash flow difficulties? - Other.

In conclusion, if the money is primarily for drug research and the development of drugs for DDC (where DDC owns the resulting drug), the money may be reflected as revenue as long as TP has earned the money by actually providing the R&D services. The portion for development of distribution channels sounds more like financing and should be treated as debt. A neutral presentation is required that does not give an advantage to one set of users (management) over another (DDC or shareholders).

IC 6-1 (Continued)

Issue: Value of investment in TDL

Write down	Leave as is
- It would appear there is some impairment since there is increased competition. - The patents may be worth less if they relate to the drugs in question. - This is a material amount since they paid \$200 million and the company is now in a break even situation meaning that any write-down would result in a loss. - Other.	- It is too early to assess the impact of the increased competition. - Regarding the patent, the company has a commitment from a third party to buy it for \$50 million. As long as the difference is recoverable from revenues no write-down is necessary. - Other.

At this point, given that it is difficult to estimate the impact of the competition, no write-down is recommended. Since the company is only considering a sale of TDL, this is not a discontinued operations issue.

Issue: Amortization period of trademark

This is a minor issue given the significance of the other issues. The amortization period could be three years if it is assumed that the company will not renew. If it is assumed they will renew, there is no need to amortize at all. Given there is little cost to renew, it would not be unreasonable to treat the life as indefinite and not book amortization. However, since TP is unsure whether it will renew it or not, there may be some question about the extent of its future economic benefits. This issue should be resolved before a decision is made about the accounting.

IC 6-2 STOCK CAR AUTO

Overview

- Shares trade on Toronto Stock Exchange for public co and therefore IFRS is a constraint
- Major shareholder looking for transparency – may be bias not to show significant contribution from gas deals
- Lawyers/plaintiffs in lawsuit may be looking to the statements to determine whether company is overly profiting at the expense of the community (pollution)
- As auditor – would want to ensure the financial statements are transparent and that they represent faithfully the economic situation of the company.

Analysis and recommendations

Revenues from upfront fee/membership

Recognize now	Recognize later
- Non-refundable fees earned by completing course - Payment for right to belong to club - The amount is measurable and collectible since received in advance - Other	- Allows access over life and therefore spread fees over life - Measurement issue – how to measure life? May use history - Other

In conclusion, would seem more prudent to recognize over the life of the member assuming this can be measured with reasonable certainty.

Insurance fee revenues

Recognize net	Show gross
- Costs are incurred for members and so reimbursed by them - The net amount is more like a commission which is earned by selling the insurance - Other	- Company has risks – the company actually takes out the insurance and negotiates – If members do not purchase – company is left on the hook - Other

In conclusion recognize on a net basis since it is not the company's main business to sell insurance.

IC 6-2 (Continued)

O&G contracts

Derivative	Expected use/executory contract
- The company appears to be trading for profit in speculative contracts - Started out buying contract for own use but now trading - Significant portion of income comes from this source (50%) - Important to be transparent – especially given user interest - If derivative – FV with gains/losses through income - Changes risk profile of company and so additional disclosures - Other	- The contracts are entered into for purposes of meeting gas needs of drivers. - Therefore, the company may document as expected use contract - Like purchase commitments – would not necessarily get recognized until delivery of gas - Other

Their business seems to have changed to include active trading and therefore these contracts should be recognized and revalued at each reporting date.

Lawsuit

Accrue cleanup costs	Do not
- Clearly at fault – business produces a significant amount of pollution - Company has a duty to cleanup that it cannot avoid if it wants to remain in the community - Other	- Pollution could be due to highway – difficult to measure - No responsibility – not breaking any laws - Other

The lawsuit seems to be at a very preliminary stage and so may disclose (only) at this point.

Other minor issues.

IC 6-3 COMMING

Overview

- Shares trade on the stock exchange and therefore IFRS is a constraint
- There is a downturn in business due to economic decline, industry alignment and tightening of capital markets – as such there may be a reporting bias to either make the financial statements look better or to clean out the balance sheet so that future years look better – 2013 is a turnaround period
- Employee bonus plan puts pressure on achieving profits in the fourth quarter. “Profits” are therefore a key number – there is an uncertainty as to how these are defined, i.e. Net Income versus operating profits
- Profitability targets may lead to manipulation – road maps are especially problematic since they imply that the numbers may be manipulated and that this is acceptable to management
- It appears as though management has manipulated profits in prior years by overstating provisions. This further supports the potential for manipulation in the current year
- Company is under scrutiny from securities regulators which means there is additional risk if aggressive accounting is employed. The lawsuits also increase this risk since in both cases, accounting will come under close scrutiny either from the regulators or in court
- Stakeholders include regulators who will be deciding whether to fine or penalize the company. They, along with the investors and their lawyers, will be looking for evidence of aggressive accounting
- Credit rating agencies will also use the financial statements to assess the creditworthiness of the company. They will be looking for evidence of aggressive accounting to support their recent downgrade
- The stock exchanges are other stakeholders and must make the decision on whether to delist the company.
- Management walks a fine line. On the one hand, they want to ensure that the employees are retained and get any bonuses that they deserve. On the other hand, they want to ensure that the accounting is transparent since the company is at risk in terms of potential lawsuits and regulatory penalties as well as being delisted from the exchange.

IC 6-3 (Continued)

Analysis and recommendations

Issue: Revenue recognition – interim product solutions

Recognize revenues	Do not
- Sale of product (software) and since already shipped, risks and rewards have passed. - Legal title and possession have both passed since the critical event is shipment. - Final version needs only minor refinements – not material – the beta version is a functional version which meets the customers' needs. - Past history shows that returns are highly unlikely. - The sale is measurable since the amount has been agreed to. - The customers have already paid half of the amount and since the other part will be paid within a short period – likely collectibility is not an issue. - Other.	- The interim product is not the product that the customer agreed to buy and therefore the customer has not received the product and no revenue should be recognized. - This is aggressive accounting and will surely be questioned by the regulators and in court. The company cannot afford any more negative publicity. - If the company does not ever ship the final product, then the sale would be null and void. - At best, perhaps the company could use the percentage of completion method and recognize a percentage of the revenues since this earnings process might be seen as a continuous one with more than one significant event i.e. interim solution and final solution deliveries. - Other.

Recognizing revenue now would likely be viewed as overly aggressive. This will have a negative impact on the employees as it may cause them to miss their targets. They may feel that the sales are valid economic transactions that have resulted from their efforts.

Issue: How to account for the acquisition of the subsidiary

The company presently owes ABC additional consideration for a prior acquisition. This will take the form of issuing additional shares.

IC 6-3 (Continued)

Accrue the additional consideration	Do nothing
- This additional consideration should be debited to the investment account. - The obligation to deliver a certain number of shares creates a duty that cannot be avoided if the acquired company performs well. It is unclear whether a fixed dollar amount is owed (liability) or a fixed number of shares (equity). - The company appears to be performing at above expectation levels to date. - IFRS requires recognition of contingent consideration upfront (measured at fair value). - Other.	- It is not known whether the acquired company will perform as well at year end and therefore, this is a contingent liability. - The argument may be made that the main problem is that the amount to be paid (in terms of shares) cannot be reliably measured. - At most, disclosure should be made. - Other.

This does not, however, affect the bonuses for this year. The higher investment cost will flow through to future years and generate lower profits in the year sold. Despite this, recognition of the contingent consideration is the acceptable route (as long as it is measurable) and it reflects the reality of the situation.

IC 6-3 (Continued)

Issue: Treatment of the abandonment of the VOF

Discontinued Ops	Not
- Separate component dealing with a specific technology – VOF. - It would appear that the operations and cash flows are distinct since it seems that the company has determined which assets will be abandoned and which employees will be let go. It sounds as though the closure is imminent (early 2015) which implies that a detailed plan is in place. - Creates transparent financial statements since the company has strategically decided to let go of old technology to allow investment and focus on the new technology. - The assets are not held for sale since they will be abandoned, and not sold. - The company may wish to assess whether assets are impaired or not since future cash flows appear to be non-existent. - The results of operations up to year end would be classified as DO on the income statement - Note that if the bonus is based on ICO, this may be an important issue. If based on NI – no impact. - Other.	- Seems like this is a part of the evolution of the business. - It is not clear that the VOF is operationally distinct – it may be no more than a production line. Likewise, no evidence that cash flows are separate. - It is misleading to try to break out the costs and revenues if you cannot measure them. - The company may wish to assess whether or not assets are impaired since future cash flows appear to be non-existent. - Other.

Transparency might dictate that the operations be segregated and that every attempt be made to show them separately so that users may assess the future prospects of the company.

IC 6-3 (Continued)

Finally, the provisions should not be used to manipulate earnings. Every attempt must be made to measure the value of the bad debts and inventory and evidence should be gathered to substantiate the values. The reversal of the provisions should be highlighted as a one-time and non-recurring item if they are no longer needed.

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 6-1 (Time 10-15 minutes)

Purpose—to provide the student with an understanding of ethical situations that could arise relating to the preparation of financial statements.

WA 6-2 (Time 25-30 minutes)

Purpose—to provide the student with an understanding of applying the general principles of revenue recognition to franchise agreements.

WA 6-3 (Time 25-30 minutes)

Purpose – to provide the student with an understanding of the gross revenue versus net revenue issue, and apply the criteria to a real situation. Students are asked to first identify factors that might indicate that gross might be reported, and factors indicating net revenue should be reported.

WA 6-4 (Time 25-30 minutes)

Purpose – to provide students with an understanding of onerous contracts – what are they and what are the issues in trying to determine when the contracts become onerous. Two situations are provided where students must determine if the contracts have become onerous or not.

WA 6-5 (Time 25-30 minutes)

Purpose – to provide students with the opportunity to consider the differences between IFRS and accounting standards for private enterprises.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 6-1 – Ethical Accountant

The request by the founders is that income in the current year be smoothed to match prior year results. Based on Comfort-Zone having a large work-in-process inventory at year-end, this would be achieved by increasing the estimated completion of projects which would in turn result in recognizing more revenue in the current period. The ethical accountant would explain to the founders that this income smoothing is not acceptable under accounting standards and would have ongoing issues in the financial reporting process. Recognition of more revenue on contracts that are at a lower level of completion will result in lower earnings in the future as these contracts require more work, after the revenue for that work has been recognized. For example, if a project is 40% complete and the estimate is increased to 70% complete, Comfort-Zone will still need to perform 60% of the contract (and incur those related costs) while only being able to recognize 30% of the profit. This could result in even lower net income results in the following year, and if the unethical reporting continues, the company could experience significant financial difficulties worsened by paying out higher bonus amounts. Although the founders are key users of the financial statements, there may be other users as well, and recognizing a higher net income than what was achieved under GAAP accounting standards would result in inaccurate information for these other users. Reporting a higher net income will increase the bonuses paid to senior management. This is likely the incentive for the founders wanting a smoothed income for the year, and it may result in the bonus payouts being higher than what Comfort-Zone can afford.

WA 6-2 –Franchise agreements

AcG 2 – Franchise Fee Revenues provides existing guidance on how to report franchise fee revenue.

(a) A franchise is an exclusive contractual privilege that is granted by a franchisor allowing a franchisee to sell a product and/or service and/or use a trade name within a specified territory. Franchise agreements are single contracts that cover a variety of different sources of revenue to be provided by the franchisor including: initial services to assist with start-up such as equipment, training, inventory, site selection, architectural and engineering fees, marketing assistance, and financing arrangements. In return, the franchisee agrees to pay a consideration usually made up of an initial fee and then ongoing fees based on system sales for the term of the contract. The contract will also outline conditions under which the franchisor may terminate the contract.

(b) The issues in recognizing revenue under a franchise contract would be the following:

1. A single contract usually covers many performance obligations for the franchisor. That is, performance obligations could result from providing:
 - i. assistance with site selection, construction of the building, architect and engineering fees and decorating
 - ii. training of franchisee and his staff on the procedures that are used
 - iii. advertising for the products and services sold by the franchisee
 - iv. assistance with administration and record keeping
 - v. providing quality control checks to ensure consistency across the franchise chain.

WA 6-2 (Continued)

1. Continued

The issue then is how to divide the contract into these multiple units. The general principle is to allocate based on relative fair values which requires stand-alone values for the different components. Does each component have a standalone value? If not, then the residual values method must be used, which requires measurement of fair values for the items not yet delivered. It may be difficult to determine the fair value if the franchisor does not provide these services or products to non-franchisee customers.

2. In some cases, additional contracts are arranged outside of the main contract to provide start up equipment, for example. If so, it must be determined whether the additional consideration is at fair market value, or is provided at a discount since the franchisee is party to a much larger agreement. A determination must also be made whether these different contracts should be treated as a single large contract, with the total consideration allocated across all the different units, or treated as separate supplies?
3. What is the amount of the consideration under the contract? The consideration would consist of the initial fees and the ongoing monthly fees. Under the contract-based approach this total consideration would have to be allocated to the different units of the contract. This is in contrast to the guideline that suggests that the initial fees cover initial services and products, and the ongoing fees would cover other items.

WA 6-2 (Continued)

4. What about for contracts where the franchisee is allowed to pay the initial franchise fee in cash instalments over a long period of time, longer than one year? The guideline suggests that discounting may be used, or revenue could be recognized using the instalment method or cost recovery method. The instalment method recognizes profit proportionately as the cash is collected. The cost recovery method recognizes equal amounts of costs and revenues as the cash is collected. Once all costs are recovered, only then would the profit be recognized as additional cash is received. Neither of these methods are acceptable under the contract-based approach. First of all, the total consideration received beyond one year would be discounted by an appropriate discount rate that reflected the credit risk of the franchisee. This discounted amount would then be included as part of the total consideration. Over time, finance income would be recorded to reflect the effective interest earned on these amounts.
5. How does one decide when the performance obligation is complete and the related revenue can be recognized? Under the general principles for the contract-based approach, this when control is transferred. For equipment, when is control transferred, if the franchisor can take back the equipment on termination of the contract? For services, when is the performance completed if the service is provided over the term of the contract, (which could be very long)? Services such as quality control and training, and new product development are all ongoing. Is revenue allocated evenly over the contract, or more in the beginning since more training and perhaps quality control will be given earlier in the contract? Or is satisfaction of the performance obligation settled by legal convention, in that the agreement outlines when the franchisor no longer has any additional obligations? AcG2 outlines that performance is complete when:
 - i. The franchisor could record revenue from the initial fees when he has performed substantially all of the initial services required. But what are the initial services and when does performance end?

WA 6-2 (Continued)

- ii. The franchisor has no remaining obligation or intent to refund amounts or forgive amounts not yet paid – Under the general principles, the cash flowing or not flowing does not indicate satisfaction of the performance obligation. It is when control is given to the franchisee or the service has been completed.
- iii. There are no other material unfulfilled conditions. General principles address when the service is provided or control is given.

Likely, it would require more detail in the contract to determine when the revenues for the initial services and products may be recorded.

- 6. The guideline suggests that the consideration for the initial equipment received at start-up of the franchise be recognized at its fair value when title has passed. The contract-based approach would allow the revenue to be recognized as title passes (which indicates control to the franchisee), but should fair value of the equipment be used? The earnings and contract-based approach requires that proportionate fair values be used. So the fair values of all the performance obligations would have to be determined and the contract fee allocated proportionately. In the case where not all the fair values are determinable, then the residual value is used, but only for the remaining obligations– not the earlier obligations.
- 7. The guideline suggests that if the initial fee is large and the ongoing fees are small, that a portion of the initial fee should be deferred and amortized over the term of the contract. And that the deferred amount should be enough to cover the costs plus a reasonable margin. Under the general principles, relative fair values are used first to determine the allocation of the consideration. If fair values are not available, then some other basis might be used which could be a cost plus basis. However, this would be applied on all the parts and not just on the ongoing services to be provided.

WA 6-2 (Continued)

8. The guideline also suggests that if the selling price of equipment to the franchisee is lower than to other customers, then again a portion of the initial fee should be deferred and added to the selling price of the equipment to ensure that a reasonable profit is made on the sale. This would be similar to treatment under the general principles of revenue recognition in that all of these “side contracts” would likely be grouped as a single contract, and the contract consideration would be allocated across all the relative parts of the contract on a relative fair value basis. Fair value in this case, would be the selling price to other customers.
9. The option in the contract that allows a franchisor to buy the franchisee at a later date is an asset and would be part of the allocation of the contract consideration. The fair value of this option would need to be recorded, which appears to follow the guideline’s suggested accounting treatment.

WA 6-2 (Continued)

10. Under the guideline, the continuing fees are recognized when the service is rendered. This would be similar to treatment under the general revenue recognition guidelines
11. Agency sales would have the same treatment under the guideline as under the contract-based approach.
12. Under the guideline, costs related to the sale of a franchise are deferred until the related revenue is recognized. This would not be allowed under current accounting rules based on the revised framework and the new definitions of an asset. These costs would not meet the criteria to be an asset – i.e. economic benefits would not flow directly from these costs. So these costs would be expensed as incurred.

WA6-3 – Gross versus net reporting of revenues

- (a) In applying the contract-based model, the entity identifies whether it has a performance obligation to “provide the goods or to arrange for another party to provide the goods” (as per Board meeting June 10, 2009). Specifically, what is the nature of the contract and what is the specific performance obligation? As per the contract-based model, revenue is then determined based on the performance obligation.
- (b) Factors that could indicate that the performance obligation is to provide the goods and therefore recognize revenue at the gross amount include (from section 3400 paragraphs 23 and 24):
- a. the entity has primary responsibility to fulfill the contract – that is has responsibility for ensuring that the order is correctly filled or services correctly delivered.
 - b. the entity bears inventory risk – before the customer order is placed or upon customer return or during shipping;
 - c. the entity has discretion to set the invoice price to the customer; and
 - d. the entity assumes the customer credit risk;
- (c) Factors that would indicate that the entity is simply an agent and arranges for the goods or services to be supplied by another party, and therefore revenue should be recorded at the net amount, include:
- a. The supplier has the primary responsibility to fulfill the contract
 - b. The consideration amount is predetermined – the amount the entity earns is fixed; and
 - c. the entity has no continuing involvement.
- (d) There are certain factors that point to gross revenue reporting of the furniture sales and some factors that indicate net revenue reporting. Indicators of gross revenue reporting would be that Office Supply Co. assumes customer credit risk since it must pay the supplier whether or not the customer has paid. The company also takes title on receipt of the inventory, but does not have any inventory risk, since the inventory was

WA 6-3 (Continued)

(d) Continued

specifically ordered for a customer. The company does install the furniture, but this would not be physically changing the goods. This installation revenue is separately earned, and would be reported at gross. The Office Supply Co. has five different suppliers to choose from but it is the customer who selects the supplier from their catalogues.

Indicators of reporting the furniture sales revenue at net would be that the company has no discretion over the selling price which is set by the supplier. The company simply earns a fixed fee which is 25% of the selling price to the customer. The supplier is also responsible for issues relating to damage, wrong colours, etc and customers are advised of this. This would indicate that the supplier has the primary responsibility for fulfilling the contract with the customer and ensuring customer satisfaction.

Given this discussion, Office Supply Co. should report the revenues from the sale of office furniture at net; that is, the selling price after deducting the cost of the furniture. In this case, the company would report only the 25% of the sales as revenue.

WA 6-4 – Revenue Recognition for onerous contracts

(a) Onerous contracts are contracts where the expected costs of fulfilling the contracts are now greater than the economic benefits that will flow from the contracts. These contracts will no longer be profitable for companies. The recognition of an onerous contract would be important in revenue recognition, since the performance obligation has increased during the term of the contract. Rather than waiting until the end of the contract to recognize any losses (or loss of profits), the performance obligation should be remeasured and the loss recognized as an expense immediately in order to more faithfully represent the future economic flows that will be realized from the contract.

(b) Each of the scenarios are discussed below:

1. For the construction contract, the expected costs will still result in a profit of \$40,000 (\$500,000 – \$460,000). This means that the costs to complete the contract will still be less than the inflows to be realized. Since the expected costs to fulfill the contract are less than the revenue to be earned, this contract is not onerous. In contrast, in using the current price approach, the profit is now less than the \$75,000 originally anticipated. If the costs to settle a breach of contract or to transfer the obligation to another party results in an amount which is higher than the carrying value, the contract will be deemed to be onerous.
2. For the gold sales contract – At a selling price of \$600, the company is still making a profit of \$450 per ounce. Consequently, the costs required to settle the obligation are lower than the inflows expected and the contract is not deemed to be onerous using the cost trigger method. However, in using the current price method, the costs to breach the contract or to transfer the obligation to another party will likely result in a value that is above the carrying value of the performance obligation and the contract will be deemed to be onerous.

WA 6-5

IFRS and ASPE both currently follow the earnings approach. Revenue recognition under ASPE requires that performance is achieved when risks and rewards transfer to the buyer, all acts have been completed and there is no continuing involvement by the seller. The second requirement is that the revenue is measurable and collection is assured. These are all consistent with IFRS. Any differences in recognition or measurement are a result of the treatment of specific sources of revenues where ASPE has remained consistent with the old Canadian GAAP prior to change over to IFRS in 2011. Recognition differences relate to the following:

- For franchise fee revenues - The installment method or cost recovery method is allowed under ASPE when recognising franchise revenue under a long term contract where collection is not reasonably estimable. These options are not mentioned under IFRS.
- Under ASPE, the completed contract method is allowed for long term contracts that consist of a single act or when revenues cannot be reasonably estimated throughout the term of the contract. Under IFRS, in this case, the recoverable revenues equal to recognized expenses would be recognized over the term of the contract. IFRS has a lot more guidance for long term contracts which ASPE has not adopted in order to keep the standards simple.

Measurement differences between ASPE and IFRS relate to differences in accounting standards as follows:

- ASPE and IFRS measure the revenue at the transaction price. However, IFRS requires different measurements if the contract is onerous. ASPE does not consider onerous contracts in its accounting standards.
- IFRS has special standards for reporting and measuring biological assets. ASPE does not have separate accounting policies with respect to biological assets.
- Layaways may have different treatment under IFRS and ASPE. Under IFRS, under some conditions, layaways may be recorded as a sale if there is a history of completion of the transaction and a significant amount has been accepted as a deposit from the customer. Under ASPE, a layaway is only recognized as a sale on delivery to the item to the customer.

WA 6-5 (Continued)

- IFRS has been considering a move to the contract based approach for revenue recognition. If this method is adopted, and ASPE stays with the earnings based approach, there will be additional differences. The AcSB has signaled that it would likely follow the new IFRS approach.

RESEARCH AND FINANCIAL ANALYSIS

RA 6-1 SHOPPERS DRUG MART

- (a) Shoppers Drug Mart gross revenues in thousands of Canadian dollars for the last two year-ends are as follows:

	<u>December 31,</u> <u>2011</u>	<u>% CHANGE</u>	<u>January 1,</u> <u>2011</u>
Sales	\$10,458,652	2.61%	\$10,192,714

Shoppers experienced a slight growth in sales compared with the prior year.

- (b)

	<u>December 31,</u> <u>2011</u>	<u>% CHANGE</u>	<u>January 1,</u> <u>2011</u>
Net Profit	\$613,934	3.73%	\$591,851

The relationship between net profit and sales revenue is evident from the review of December 31, 2011 and January 1, 2011 results. By reviewing the Statement of Earnings in detail, the higher change in net profit compared with sales is related to lower relative inventory costs which resulted in higher gross margins of about 3.4%.

- (c) The company recognizes revenue when goods are sold to customers. This is when the risks and rewards of ownership have transferred to the customer and it is probable that reliably measured revenue will flow to the company. At the time these conditions are met, revenue is measured at the current market price. When loyalty points are awarded in a transaction the revenue allocated to loyalty points is deferred and recognized when the points are redeemed. The measurement of the points revenue is based on the fair value of the awards that points can be redeemed for.

RA 6-1 (Continued)

- (d) Shoppers had to restate revenue when they transitioned to IFRS. The adjustment to sales was a decrease of \$183,353 (thousand) that was associated with the Shoppers Optimum Loyalty Card Program. The reason for the adjustment is that revenue recognition for a loyalty program differs under IFRS compared to ASPE. Previously, Shoppers recorded the liability and expense related to loyalty points as estimated cost when the points were earned. Under IFRS, Shoppers defers a portion of revenue earned on sales transactions that is equivalent to the fair value of loyalty points. This deferred revenue is the source of the adjustment made on the transition to IFRS as previously an expense would have been recorded.

RA 6-2 BCE INC. and TELUS CORPORATION

a) BCE recognizes many different types of revenue as outlined below (note 1):

- Fees for local, long distance and wireless services are recognized when the services are provided;
- Network access fees, licence fees, hosting fees, maintenance fees and standby fees are recognized over the term of the contract;
- Subscriber revenues are recognized when the customer receives the service;
- Advertising revenue net of agency commissions are recognized when the ad has been delivered or aired;
- Sales of equipment are recognized when the equipment is delivered and accepted by the customer;
- On long term contracts, revenue is recognized based on contract milestones, as equipment is delivered and accepted, and as services are provided to the customer – this would be an example of a contract with multiple deliverables; and
- Rebates and allowances are recorded against revenue.

(b) TELUS also recognizes many different types of revenue as outline below (note Note 1):

- Voice local, voice long distance, data and wireless services revenues are based on usage of the company's network and facilities and the contract fees. These revenues are recognized on an accrual basis whereby the company estimates the amount of revenues earned but not yet billed.
- Upfront customer activation and connection fees net of direct costs are deferred and recognized over the average expected term of the customer contract.
- Discounts and rebates are recorded as a reduction in revenues when there is no identifiable benefit for this consideration;
- Product revenues and sales of wireless handsets and customer premises' equipment are recognized when the products are delivered and accepted by the customer.
- Equipment leasing income is recognized over the term of the lease – normally on a straight line basis.
- For high cost serving areas where the company earns a subsidy from CRTC, the company accrues the revenue using the subsidized rate and the number of residential lines.

RA 6-2 (Continued)

(b) Continued

- Due to CRTC regulations, the company is also required to defer a portion of wireline revenues received from non-high cost serving areas and uses the liability method to do so. These amounts can be recognized only when certain qualifying actions are taken by the company which include providing services to rural and remote communities. The company outlines these regulations in detail and the impact on the company's reporting of revenue.

RA 6-2 (Continued)

- (c) BCE reports that when the company has arranged with subcontractors to provide the service directly to customers, the company must determine whether it is acting as a principal or as an agent in that relationship. Where the company determines that it is the principal, revenue is reported at the gross amount. Where the company determines that it is an agent, revenue is reported net. However, the company provides no details on what factors are considered in determining how the revenue will be recognized. TELUS makes no reference to subcontracted work or reporting revenue at net amounts.
- (d) Both companies have multiple element arrangements. BCE states that these arrangements include wireless and video products and services. The company separates out the different components when all three of the following conditions are met: product or service has stand-alone value to the customer; the fair value of the undelivered items can be reliably and objectively measured; and where there is right of return, the undelivered items are under the company's control. If all items in the contract have a determinable fair value, then the contract price is allocated based on the relative fair values of the items. If this is not the case, then the fair value of the items not yet delivered is determined, and the remaining amount of the contract allocated to the delivered items (the residual method). Where these three conditions cannot be met, the contract is allocated to revenue on a pro-rata basis over the term of the contract.

TELUS states that its contracts to provide "integrated solutions" to customers may include multiple deliverables for products and services that are delivered at different times over the contract. In this case, the total contract price is allocated based the relative fair values of each component. If the company enters into several contracts with the same customer over a short period of time, these contracts are reviewed to ensure relative fair values are used, but otherwise they are accounted for as separate arrangements.

RA 6-2 (Continued)

- (e) TELUS goes into a lot of detail about the regulated rates that it can charge for high serving areas and non-high serving areas. The unique accounting policy that Telus uses to deal with revenue in non-high cost serving areas is a deferral account. As a result of a CRTC decision, Telus has a deferral account to record some of the income received for basic residential services in non-high cost serving areas. The deferral account represents a liability for Telus and the liability is discharged when Telus completes qualifying actions as required by CRTC. The qualifying activities relate to servicing high-cost and remote areas. The deferral of revenue is an appropriate accounting treatment as Telus has an obligation to the CRTC to service the remote areas in return for being allowed to charge higher rates to the non-high cost serving areas.
- (f) TELUS's revenue recognition appears to be more comprehensive and descriptive for certain items. More detailed descriptions are given as to the nature of the services provided, and how differences in accruals and billings are treated. On the other hand BCE is much more specific in the types of revenue generated and how these are recognized. It gives more guidance on the types of contracts that have multiple deliverables and how the allocation is decided.

RA 6-3 EADS N.V. CONSTRUCTION CONTRACTS

- a) As discussed in note 1, EADS is in the business of manufacturing commercial aircraft, civil and military helicopters, commercial space launch vehicles, missiles, military aircraft, satellites, defence systems and defence electronics along with related services.
- b) EADS uses the percentage of completion method for construction contracts. The company uses three different methods to determine the stage of completion depending on the nature of the contract:
- based on contractually agreed upon technical milestones;
 - based on the number of units delivered;
 - as the work progresses.
- When the percentage of completion cannot be determined, for example when the contract is in its early stages, or when the percentage of completion cannot be reliably determined, then the company expenses all costs incurred to date and recognizes revenues to the extent of these costs. Only revenues that are recoverable are recognized. This method does not result in any profit being recognized until later in the contract term. Once the stage of completion can be reliably determined, revenue from that point on is recognized based on the percentage of completion method.
- c) The company reviews the contracts in progress regularly to ensure that changes in profit rates are immediately recognized into income. In the case of probable losses on contracts, the company expenses estimated losses at completion as soon as they are predicted.
- d) As per Note 19, the company has included in receivables the amounts of contracts under the percentage of completion method, net of advance payments received from the customer. At December 31, 2011, this amount was EUR 2,170 million (EUR 2,829 million in 2010).

The total aggregate amount of costs incurred and recognized profits (less recognized losses) to date is EUR 55,858 (2010 was EUR50,305). The gross amount due from customers was EUR 4,204 million and represents the contract costs plus recognized profits to date, less progress billings on contracts in progress. The gross amount due to customers was EUR 1,688 million and represents progress billings in excess of incurred contract costs plus recognized profits (less loss). Based on this information, the total billings to date would be: EUR 53,342 million (= 55,858 -4,204 +1,688).

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CHAPTER 7

CASH AND RECEIVABLES

ASSIGNMENT CLASSIFICATION TABLE

Topics		Brief Exercises	Exercises	Problems	Writing Assignments
1	Accounting for cash and financial assets.	1, 3, 4	1, 2	1	1
2	Accounting for accounts receivable, sales discounts, and other allowances.	2, 5, 6, 7, 8, 9	3, 4, 5, 6, 7		
3	Bad debts and allowance for doubtful accounts.	10, 11	8, 9, 10, 11, 12, 13	2, 3, 4, 5, 6, 12, 13	2, 4
4	Accounting for notes receivable.	12, 13, 14, 15, 16, 17	14, 15, 16	7, 8, 9, 10	3
5	Assignment and factoring of accounts receivable.	17, 18, 19, 20	7, 17, 18, 19, 20	10, 11, 13	
6	Analysis of receivables.	21, 22	21, 22	1, 10, 12, 13	
7	Petty cash and bank reconciliations.*	23, 24, 25, 26	23, 24, 25	14, 15, 16, 17	

*This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E7-1	Determining cash balance.	Moderate	10-15
E7-2	Determine cash balance.	Moderate	10-15
E7-3	Financial statement presentation of receivables.	Simple	10-15
E7-4	Determine ending accounts receivable.	Simple	10-15
E7-5	Record sales gross and net.	Simple	15-20
E7-6	Record sales gross and net.	Simple	15-20
E7-7	Journalizing various receivable transactions including factoring.	Simple	15-20
E7-8	Bad debts – recording.	Simple	5-10
E7-9	Calculating allowance for doubtful accounts.	Simple	5-10
E7-10	Bad debt reporting.	Simple	10-15
E7-11	Calculating bad debts and preparing journal entries.	Simple	10-15
E7-12	Bad debts—aging.	Simple	10-15
E7-13	Interest bearing and non-interest-bearing notes.	Moderate	20-25
E7-14	Non-interest-bearing note.	Moderate	15-20
E7-15	Notes receivable with zero or low interest rates.	Moderate	30-35
E7-16	Notes receivable with zero interest rate.	Moderate	15-20
E7-17	Assigned accounts receivable.	Simple	10-15
E7-18	Transfer of receivables with recourse.	Simple	10-15
E7-19	Transfer of receivables with recourse.	Moderate	15-20
E7-20	Securitization transaction.	Moderate	15-20
E7-21	Determine receivables balance, turnover ratio.	Moderate	10-15
E7-22	Accounts receivable turnover ratio.	Moderate	10-15
*E7-23	Petty cash.	Simple	5-10
*E7-24	Bank reconciliation and adjusting entries.	Moderate	15-20
*E7-25	Bank reconciliation and adjusting entries.	Simple	15-20

ASSIGNMENT CHARACTERISTICS TABLE (CONTINUED)

Item	Description	Level of Difficulty	Time (minutes)
P7-1	Determine proper cash balance.	Simple	20-25
P7-2	Bad debt reporting.	Moderate	20-25
P7-3	Bad debt reporting—aging.	Moderate	20-30
P7-4	Bad debt reporting.	Moderate	25-35
P7-5	Bad debt reporting.	Complex	25-35
P7-6	Journalize various accounts receivable transactions.	Simple	20-25
P7-7	Notes receivable journal entries.	Moderate	20-30
P7-8	Instalment note receivable.	Moderate	30-35
P7-9	Several notes receivable.	Complex	40-50
P7-10	Comprehensive receivables.	Moderate	25-35
P7-11	Comprehensive receivables.	Moderate	15-20
P7-12	Bad debt reporting issues.	Moderate	25-30
P7-13	Comprehensive including factoring.	Complex	30-35
*P7-14	Petty cash, bank reconciliation.	Moderate	20-25
*P7-15	Bank reconciliation and adjusting entries.	Moderate	20-30
*P7-16	Bank reconciliation and adjusting entries.	Moderate	20-30
*P7-17	Bank reconciliation.	Moderate	25-35

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 7-1

Creative requires a higher amount of cash on hand in comparison to Technology. Creative should maintain a significant amount of cash on hand to service interest and upcoming debt repayments, finance inventory and pay expenses in the months preceding the holiday season, and purchase equipment needed to sustain current operations. Maintaining a significant amount of cash on hand will also minimize Creative's borrowing requirements. In comparison, Technology has no debt repayments to service, and requires only very few capital expenditures to maintain its noncurrent assets used in current operations. As a mature, successful software development company, Technology likely has excess cash from operating activities which should be invested to try to minimize "idle" cash. Having significant "idle" cash on hand may eventually lead to wasteful spending or poor investment decisions by Technology's management.

BRIEF EXERCISE 7-2

- 1. Implement more selective credit-granting policies: perform more rigorous credit checks prior to granting credit, require cash on delivery (COD) from new customers, establish credit limits for each account.**
- 2. Implement more rigorous collection policies: establish procedures for internal collections personnel to follow (including follow up phone calls, collection letters), hold pending orders until payment is received, and/or refer collections to an external collection agency.**
- 3. Charge interest on overdue accounts.**

BRIEF EXERCISE 7-3

Cash in bank—savings account	\$48,500
Cash on hand	14,800
Chequing account balance	30,500
Cash in foreign bank	90,000
Debt instrument with maturity date of three months from the date acquired	<u>12,000</u>
Cash and cash equivalents under ASPE	<u>\$195,800</u>

If Stowe follows IFRS, preferred shares acquired shortly before their maturity date would qualify as a cash equivalent. Therefore, under IFRS, cash and cash equivalents would total \$211,300 (\$195,800 + \$15,500).

BRIEF EXERCISE 7-4

1. (a) Current, (b) Trade receivable
2. (a) Current, (b) Not a receivable; current liability
3. (a) Current, (b) Nontrade receivable
4. (a) Noncurrent, (b) Trade receivable
5. (a) Noncurrent, (b) Nontrade receivable

BRIEF EXERCISE 7-5

05/14/14 No entry required

05/31/14	Accounts Receivable	2,200	
	Sales Revenue		2,200

BRIEF EXERCISE 7-6

Accounts Receivable	40,000	
Sales Revenue.....		40,000
Cash	34,650	
Sales Discounts	350	
Accounts Receivable		35,000
Cash	5,000	
Accounts Receivable		5,000

BRIEF EXERCISE 7-7

Accounts Receivable	39,600	
Sales Revenue.....		39,600
(\$40,000 X .99)		
Cash	34,650	
Accounts Receivable		34,650
(\$35,000 X .99)		
Accounts Receivable	50	
Sales Discounts Forfeited		50
Cash	5,000	
Accounts Receivable		5,000

BRIEF EXERCISE 7-8

Accounts Receivable	45,000	
Sales Revenue.....		45,000
Cash	44,550	
Sales Discounts	450	
Accounts Receivable		45,000

BRIEF EXERCISE 7-9

Accounts Receivable	44,550	
Sales Revenue.....		44,550
(\$45,000 X .99)		
Cash	44,550	
Accounts Receivable		44,550

BRIEF EXERCISE 7-10

Bad Debt Expense.....	27,200	
Allowance for Doubtful Accounts		27,200
(\$30,000 – \$2,800)		

BRIEF EXERCISE 7-11

Bad Debt Expense.....	33,000	
Allowance for Doubtful Accounts		33,000
(\$30,000 + \$3,000)		

BRIEF EXERCISE 7-12

(a)

11/1/14	Notes Receivable	20,000	
	Sales Revenue		20,000

12/31/14	Interest Receivable	200	
	Interest Income		200
	(\$20,000 X 6% X 2/12)		

5/1/15	Cash	20,600	
	Notes Receivable		20,000
	Interest Receivable		200
	Interest Income		400
	(\$400 = \$20,000 X 6% X 4/12)		

(b)

1/1/15	Interest Income	200	
	Interest Receivable		200

5/1/15	Cash	20,600	
	Notes Receivable		20,000
	Interest Income		600

BRIEF EXERCISE 7-13

Notes Receivable.....	47,530	
Cash		47,530
Cash	49,000	
Notes Receivable		47,530
Interest Income.....		1,470

BRIEF EXERCISE 7-14

(a)

Notes Receivable.....	30,053	
Cash		30,053
Notes Receivable.....	3,005	
Interest Income.....		3,005
(\$30,053 X 10%)		
Notes Receivable.....	3,306	
Interest Income.....		3,306
([\$30,053 + \$3,005] X 10%)		
Notes Receivable.....	3,636	
Interest Income.....		3,636
([\$30,053 + \$3,005 + \$3,306] X 10%)		
Cash	40,000	
Notes Receivable.....		40,000

- (b) Take the present value of the cash flows and divide by the face value of the note (\$30,053 / \$40,000) gives a factor of .75132. Under the table for the present value of a single payment, for three years, the factor .75132 appears under the column for 10%.

Using a financial calculator:

PV	\$ (30,053)	
I	?	Yields 10.0%
N	3	
PMT	0	
FV	40,000	
Type	0	

Excel formula: =RATE(nper,pmt,pv,fv,type)

BRIEF EXERCISE 7-15

(a) Notes Receivable	3,861	
Accumulated Depreciation – Equipment		
..... (\$15,000 – \$2,500)	12,500	
Equipment		15,000
Gain on Sale of Equipment.....		1,361

Using a financial calculator:

PV	?	Yield	\$(3,861)
I	9%		
N	3		
PMT	0		
FV	\$5,000		
Type	0		

Excel formula: =PV(rate,nper,pmt,fv,type)

* Present value of the note:

$$\$5,000 \times PVF_{3, 9\%} = \$5,000 \times .77218 = \$3,861$$

$$\text{Discount on Note Receivable} = \$5,000 - \$3,861 = \$1,139$$

Fair Value of Equipment (present value of note)	\$3,861
Carrying Amount	<u>2,500</u>
Gain on Sale of Equipment	<u>\$1,361</u>

(b) Since Barthos follows IFRS, the effective interest method is required for recognizing interest income.

Interest for Year 1:

Notes Receivable	347	
Interest Income.....		347
(\$3,861 X 9% = \$347)		

Interest for Year 2:

Notes Receivable	379	
Interest Income.....		379
([\$3,861 + \$347] X 9% = \$379)		

BRIEF EXERCISE 7-15 (Continued)

(b) Continued:

Interest for Year 3:		
Notes Receivable	413	
Interest Income.....		413
([\$3,861 + \$347 + \$379] X 9% = \$413)		

(c) Collection of Note at Maturity:

Cash.....	5,000	
Notes Receivable		5,000

BRIEF EXERCISE 7-16

(a) Notes Receivable	3,861	
Accumulated Depreciation - Equipment		
..... (\$15,000 – \$2,500)	12,500	
Equipment		15,000
Gain on Sale of Equipment.....		1,361

Using a financial calculator:

PV	?	Yield	\$(3,861)
I	9%		
N	3		
PMT	0		
FV	\$5,000		
Type	0		

Excel formula: =PV(rate,nper,pmt,fv,type)

* Present value of the note:

$$\$5,000 \times PVF_{3, 9\%} = \$5,000 \times .77218 = \$3,861$$

$$\text{Discount on Note Receivable} = \$5,000 - \$3,861 = \$1,139$$

Fair Value of Equipment (present value of note)	\$3,861
Carrying Amount	<u>2,500</u>
Gain on Sale of Equipment	<u>\$1,361</u>

(b) Interest for Year 1:

Notes Receivable	380	
Interest Income.....		380
(\$1,139 X 1/3 = \$380)		

Interest for Year 2:

Notes Receivable	380	
Interest Income.....		380
(\$1,139 X 1/3 = \$380)		

BRIEF EXERCISE 7-16 (Continued)

(b) Continued:

Interest for Year 3:		
Notes Receivable	379*	
Interest Income.....		379*
(\$1,139 - \$380 - \$380 = \$379)		
*Adjusted due to rounding.		

(c) Collection of Note at Maturity:

Cash.....	5,000	
Notes Receivable		5,000

BRIEF EXERCISE 7-17

Alpha Inc.

Cash	1,520,000	
Finance Expense		
(\$2,000,000 X 4%)	80,000	
Notes Payable.....		1,600,000

Alberta Provincial Bank

Notes Receivable.....	1,600,000	
Cash		1,520,000
Finance Revenue.....		80,000

BRIEF EXERCISE 7-18

Landstalker

Cash	682,500	
Due from Factor	37,500	
Loss on Sale of Receivables	30,000	
Accounts Receivable		750,000

Leander

Accounts Receivable	750,000	
Due to Customer		37,500
Financing Revenue		30,000
Cash		682,500

BRIEF EXERCISE 7-19

Cash	682,500	
Due from Factor	37,500	
Loss on Sale of Receivables	39,000	
Accounts Receivable		750,000
Recourse Liability		9,000

BRIEF EXERCISE 7-20

Cash	620,000	
Loss on Sale of Receivables	6,000	
Accounts Receivable		600,000
Recourse Liability		26,000

BRIEF EXERCISE 7-21

The accounts receivable turnover ratio is calculated as follows:

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$23,223,804}{\frac{\$616,797 + \$590,322}{2}} = 38.48 \text{ times}$$

The average collection period for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{38.48} = 9.49 \text{ days}$$

BRIEF EXERCISE 7-22

2010:

The accounts receivable turnover ratio is calculated as follows:

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$18,069}{\frac{\$2,525 + \$1,140}{2}} = 9.86 \text{ times}$$

The average collection period for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{9.86} = 37.02 \text{ days}$$

2011:

The accounts receivable turnover ratio is calculated as follows:

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$19,497}{\frac{\$2,964 + \$2,525}{2}} = 7.10 \text{ times}$$

The average collection period for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{7.10} = 51.41 \text{ days}$$

As indicated from these ratios, BCE Inc.'s accounts receivable turnover ratio deteriorated in 2011 (to 7.10 times from 9.86 times in 2010). BCE's average collection period deteriorated as well, to 51.41 days from 37.02 days in 2010).

***BRIEF EXERCISE 7-23**

Petty Cash.....	400	
Cash		400
Supplies	174	
Inventory.....	167	
Cash Over and Short.....	2	
Cash (\$400 – \$57)		343

***BRIEF EXERCISE 7-24**

(a) Petty Cash	200	
Cash		200
(b) Cash	150	
Petty Cash		150

Or if combined with the entry above, for (b) this would produce:

Supplies	174	
Inventory.....	167	
Cash Over and Short.....	2	
Cash (\$400 – \$57 – \$150)		193
Petty Cash		150

***BRIEF EXERCISE 7-25**

(1) Added to balance per bank statement (a)

(2) Not needed for reconciliation (e)

(3) Added to balance per books (c)

(4) Deducted from balance per books (d)

(5) Not needed for reconciliation (e)

(6) Deducted from balance per bank statement (b)

(7) Deducted from balance per books (d)

***BRIEF EXERCISE 7-26**

Item			
(3)	Cash	31	
	Interest Income		31
(4)	Office Expense- Bank Charges.....	20	
	Cash		20
(7)	Accounts Receivable.....	280	
	Cash		280

SOLUTIONS TO EXERCISES

EXERCISE 7-1 (10-15 minutes)

(a) Cash includes the following:

1. Commercial savings account— First National Bank	\$ 600,000
1. Commercial chequing account— First National Bank	900,000
3. Money market fund—Commercial Bank of Montreal	5,000,000
6. Petty cash	3,000
8. Cash floats (8 X \$475 + 12 X \$600)	11,000
12. Currency and coin on hand	<u>7,700</u>
Cash reported on December 31, 2014, balance sheet	<u><u>\$6,521,700</u></u>

(b) Other items classified as follows:

1. The bank overdraft at the Royal Scotia Bank of \$35,000 should be reported as a current liability as there is no available cash in another account at Royal Scotia Bank available for offset.
2. The balance (at First National Bank of \$100,000) requirement does not affect the balance in cash. A note disclosure indicating the arrangement and the amounts involved should be described in the notes.
4. Travel advances (to be reimbursed by employees) should be reported as prepaid travel in the amount of \$18,000.
5. Cash restricted in the amount of \$1,500,000 for the retirement of long-term debt should be reported as a noncurrent asset identified as "Cash restricted for retirement of long-term debt."
7. An IOU from Marianne Koch should be reported as a receivable from officer in the amount of \$1,900.

EXERCISE 7-1 (Continued)

- 9. Certificates of deposits of \$500,000 each should be classified as temporary investments (probably using the cost/amortized cost model or the fair value through net income model). They cannot be cash equivalents as the original maturities exceed 90 days.**
 - 10. The first postdated cheque of \$25,000 should be reported as an accounts receivable. The second postdated cheque of \$11,500 is for unearned revenue, or customer deposits and should not be recognized until the cheque is deposited.**
 - 11. Commercial paper should be reported as temporary investments (probably using the cost/amortized cost model or the fair value through net income model) or as a cash equivalent.**
 - 13. Investments in shares of Sortel should be classified with Trading Securities at the fair value of \$4,100.**
- (c) The \$100,000 balance in item 2 is called a compensating balance. First National Bank would require Eastwood to maintain a compensating balance to support any existing or maturing obligations and/or credit facilities that Eastwood has with First National Bank.**
- (d) A potential lender to Eastwood would be interested in Eastwood's liquidity, solvency, and ability to service obligations. From the perspective of a potential lender, it is important that Eastwood excludes the \$1.5 million restricted cash from the amount of cash reported, because the \$1.5 million cannot be used by Eastwood to meet current obligations. Inclusion of the \$1.5 million restricted cash in the amount of cash reported would result in an inaccurately reported liquidity position.**

EXERCISE 7-2 (10-15 minutes)

1. Cash balance of \$625,000. Only the chequing account balance should be reported as cash. The certificate of deposit of \$1,100,000 should be reported as a temporary investment, the cash advance to subsidiary of \$980,000 should be reported as a receivable, and the utility deposit of \$180 should be identified as a receivable from the gas company.

2. Cash balance is \$484,650 calculated as follows:

Chequing account balance	\$500,000
Overdraft	(17,000)
Petty cash	300
Coin and currency	<u>1,350</u>
	<u>\$484,650</u>

Cash held in a bond sinking fund is restricted. Assuming that the bonds are noncurrent, the restricted cash is also reported as noncurrent.

3. Cash balance is \$549,800 calculated as follows:

Chequing account balance	\$540,000
Certified cheque from customer	<u>9,800</u>
	<u>\$549,800</u>

The postdated cheque of \$11,000 should be reported as a receivable. Assuming the \$100,000 cash restricted due to compensating balance is not included in the chequing account amount, it should be reported separately and classified as current or noncurrent (depending on the nature of the arrangement). If the \$100,000 is included in the cash balance above and is correctly classified as a current item, this restriction must be disclosed and the nature of the restriction would be described in a note indicating the type of arrangement and amount. Postage stamps on hand are reported as part of supplies or prepaid expenses.

EXERCISE 7-2 (Continued)

4. Cash balance is \$95,000 calculated as follows:

Chequing account balance	\$57,000
Money market mutual fund	<u>38,000</u>
	<u>\$95,000</u>

The NSF cheque received from customer should be reported as a receivable (removed from the cash account per books, and added to accounts receivable).

5. Cash balance is \$700,900 calculated as follows:

Chequing account balance	\$700,000
Cash advance received from customer	<u>900</u>
	<u>\$700,900</u>

Cash restricted for future plant expansion of \$500,000 should be reported as restricted cash in noncurrent assets. The 60-day treasury bills of \$180,000 should be reported as cash equivalents. Cash advance received from customer of \$900 should be included as part of cash and the credit reported as a liability; cash advance of \$7,000 to company executive should be reported as a receivable; refundable deposit of \$26,000 paid to federal government should be reported as a receivable.

EXERCISE 7-3 (10-15 minutes)

Current assets

Accounts receivable

Customers

Accounts (of which accounts in
the amount of \$40,000 have
been pledged as security for a
bank loan)

\$165,000

Instalment accounts collectible
due in 2015

48,000

Total from customers

213,000

Other* (\$12,640 + \$49,649)

62,289

\$275,289

Non-Current Accounts Receivable

Advance to subsidiary company**

101,000

Instalment accounts collectible
due after December 31, 2015

44,000

* These items could be separately classified, if considered material

** This classification assumes that these receivables are not collectible in the near term based on the fact that they were advanced in 2009 and remain outstanding.

EXERCISE 7-4 (10-15 minutes)

(a)

Calculation of cost of goods sold:

Merchandise purchased	\$320,000
Less: Ending inventory	<u>99,000</u>
Cost of goods sold	<u><u>\$221,000</u></u>

$$\begin{aligned}\text{Selling price} &= 1.4 \times \text{Cost of good sold} \\ &= 1.4 \times \$221,000 \\ &= \$309,400\end{aligned}$$

Sales on account	\$309,400	
Less collections	<u>198,000</u>	
Uncollected balance	111,400	
Balance per ledger	<u>86,500</u>	
Apparent shortage	<u><u>\$ 24,900</u></u>	—Enough for a large down payment on a new car!

- (b) Accounts receivable balance per ledger of \$86,500 is less than estimated accounts receivable of \$111,400, suggesting that some accounts receivable collections were recorded as collected, but were not actually deposited to the company's bank account. Proper segregation of duties would help prevent theft, for example, an employee other than Mitra should be responsible for opening the mail and sending only cheque remittance advices to Mitra for updating of accounts receivable records. Every effort should be made to encourage customers to pay by cheque, in order to maintain a paper trail of collections received. Preparation of a monthly bank reconciliation would help detect if cash was recorded as collected, but not deposited to the company's bank account.

EXERCISE 7-5 (15-20 minutes)

Sales recorded at gross:

(a) July 1	Accounts Receivable	82,000	
	Sales Revenue		82,000
July 5	Sales Returns and Allowances	6,200	
	Accounts Receivable		6,200
July 10	Cash	74,284	
	Sales Discounts (\$75,800 X 2%)	1,516	
	Accounts Receivable		75,800
July 17	Accounts Receivable	160,000	
	Sales Revenue		160,000
July 26	Cash	78,400	
	Sales Discounts (\$160,000 X .5 X 2%)	1,600	
	Accounts Receivable.....		80,000
Aug. 30	Cash	80,000	
	Accounts Receivable.....		80,000

EXERCISE 7-5 (Continued)

Sales recorded at net:

(b) July 1	Accounts Receivable	80,360	
	Sales Revenue		80,360
	(\$82,000 X .98)		
July 5	Sales Returns and Allowances	6,076	
	Accounts Receivable		6,076
	(\$6,200 X .98)		
July 10	Cash	74,284	
	Accounts Receivable		74,284
July 17	Accounts Receivable	156,800	
	Sales Revenue		156,800
	(\$160,000 X .98)		
July 26	Cash	78,400	
	Accounts Receivable.....		78,400
Aug. 30	Cash	80,000	
	Sales Discounts Forfeited		1,600
	Accounts Receivable.....		78,400

(Note to instructor: Sales discounts forfeited could have been recognized at the time the discount period lapsed. The company, however, would probably not record this forfeiture until final cash settlement.)

EXERCISE 7-6 (15-20 minutes)

Sales recorded at gross:

(a)1. June 3	Accounts Receivable	3,000	
	Sales Revenue		3,000
June 5	Sales Returns and Allowances.....	500	
	Accounts Receivable		500
June 7	Freight-Out.....	25	
	Cash		25
June 12	Cash	2,425	
	Sales Discounts (\$2,500 X 3%).....	75	
	Accounts Receivable (\$3,000-\$500)		2,500

Sales recorded at net:

2. June 3	Accounts Receivable	2,910	
	Sales Revenue (\$3,000 X 97%)		2,910
June 5	Sales Returns and Allowances.....	485	
	Accounts Receivable		
	(\$500 X 97%)		485
June 7	Freight-Out.....	25	
	Cash		25
June 12	Cash	2,425	
	Accounts Receivable		
	(\$2,910 – \$485).....		2,425

EXERCISE 7-6 (Continued)

(b)	July 29	Cash	2,500
		Accounts Receivable	2,425
		Sales Discounts Forfeited	75

(Note to instructor: Sales discounts forfeited could have been recognized at the time the discount period lapsed. The company, however, would probably not record this forfeiture until final cash settlement.)

- (c) Implied interest rate on accounts receivable not paid to Arnold within the discount period = $3\% / (50/365) = 21.9\%$. (Note that 21.9% is the stated annual interest rate.) If Chester Arthur has a line of credit facility with its bank at an interest rate of 10%, Chester Arthur is recommended to pay amounts owing to Arnold within the discount period, using funds borrowed against its line of credit facility. Chester Arthur would be using funds charged interest at a rate of 10%, to earn 21.9% interest on early payment of amounts owing to Arnold.**

EXERCISE 7-7 (15-20 minutes)

7/1	Accounts Receivable	8,730	
	Sales Revenue (\$9,000 X 97%)		8,730
7/3	Sales Returns and Allowances	679	
	Accounts Receivable		
	(\$700 X 97%)		679
7/5	Cash (\$19,000 X 91%)	17,290	
	Loss on Sale of Receivables	1,710	
	Accounts Receivable (\$19,000 X 98%) .		18,620
	Sales Discounts Forfeited		380

(Note: It is possible that the company already recorded the Sales Discounts Forfeited. In this case, the credit to the Accounts Receivable would be for \$19,000. The same point applies to the next entry as well.)

7/9	Accounts Receivable (\$15,000 x 2%)	300	
	Sales Discounts Forfeited.....		300
	Cash	10,670	
	Finance Expense (\$11,000 X 3%).....	330	
	Notes Payable		11,000
7/11	Account Receivable... ..	249	
	Sales Discounts Forfeited.....		249
	[(\$9,000 – \$700) X 3%]		

This entry may be made at the next time financial statements are prepared. Also, it may occur on 12/29 when Harding Ltd.'s receivable is adjusted.

12/29	Allowance for Doubtful Accounts	7,470	
	Accounts Receivable.....		7,470
	[\$8,730 – \$679 + \$249 = \$8,300;		
	\$8,300 – (10% X \$8,300) = \$7,470]		

EXERCISE 7-8 (5-10 minutes)

(a)

Morganfield Ltd. accounts receivable writeoff:

Allowance for Doubtful Accounts.....	16,000	
Accounts Receivable.....		16,000

McKinley Ltd. reinstatement of partial accounts receivable for amounts previously written off and now determined to be collectible:

Accounts Receivable—McKinley Ltd.	6,000	
Allowance for Doubtful Accounts		6,000
(\$60,000 X 10%)		

(b)

	Before Adjustments	After Adjustments
Accounts Receivable (Book Value)	\$ 1,200,000	\$ 1,190,000
Allowance for Doubtful Accounts	80,000	70,000
Net Book Value	\$ 1,120,000	\$ 1,120,000

EXERCISE 7-9 (5-10 minutes)

Balance, January 1, 2014	\$400,000
Bad debt expense accrual .8% X (\$80,000,000 X 0.9)	<u>576,000</u>
	976,000
Uncollectible receivables written off	<u>(500,000)</u>
Balance, December 31, 2014 before adjustment	476,000
Allowance adjustment	<u>49,000</u>
Balance, December 31, 2014	<u><u>\$525,000</u></u>

Bad Debt Expense.....	49,000	
 Allowance for Doubtful Accounts.....		49,000

EXERCISE 7-10 (10-15 minutes)

(a) The direct writeoff approach is not theoretically justifiable. Direct writeoff does not match (bad debt) expense with revenues of the period, nor does it result in receivables being stated at estimated realizable value on the balance sheet.

**(b) Bad Debt Expense using the allowance method and percentage-of-sales approach = 2% of Sales = \$64,000
(\$3,200,000 X 2%)**

Bad Debt Expense using the direct writeoff method = \$33,330 (\$7,700 + \$6,800 + \$12,000 + \$6,830)

Net income would be \$30,670 (\$64,000 – \$33,330) lower under the allowance method and percentage-of-sales approach.

(c) The direct writeoff method is not considered appropriate, except when the amount uncollectible is highly immaterial.

EXERCISE 7-11 (10-15 minutes)

(a)

1.	Bad Debt Expense.....	6,150	
	Allowance for Doubtful Accounts.....		6,150
	[(\$105,000 X 4%) + \$1,950]		
2.	Bad Debt Expense.....	7,758	
	Allowance for Doubtful Accounts*		7,758
3.	Bad Debt Expense.....	2,250	
	Allowance for Doubtful Accounts.....		2,250
	[(\$105,000 X 4%) - \$1,950]		
4.	Bad Debt Expense.....	3,858	
	Allowance for Doubtful Accounts**		3,858

*(\$36,000 X .01 + \$48,000 X .05 + \$12,200 X .12 + \$8,800 X .18) + \$1,950

**(\$36,000 X .01 + \$48,000 X .05 + \$12,200 X .12 + \$8,800 X .18) - \$1,950

(b) An unadjusted debit balance in allowance for doubtful accounts at year end is a result, in general, of write-offs during the year exceeding the total of beginning credit balance in allowance for doubtful accounts, plus the current year bad debt expense accrual. As an independent reviewer of Chloe's financial statements, we can note that a bad debt expense accrual in the current year is needed to ensure there is a sufficient credit balance in the allowance for doubtful accounts at the end of the year. We would want to ensure that accounts receivable (net) is valued at net realizable value on the balance sheet.

EXERCISE 7-12 (10-15 minutes)

Balance 1/1 (\$850 – \$155)	\$ 695	Over one year
4/12 (#2412) (\$2,110 – \$1,000 – \$300)	810	Eight months and 18 days
11/18 (#5681) (\$2,000 – \$1,250)	<u>750</u>	One month and 12 days
Balance December 31	<u><u>\$2,255</u></u>	

In as much as later invoices have been paid in full, all three of these amounts should be investigated in order to determine why Hopkins Co. has not paid them. The amounts in the beginning balance and #2412 should be of particular concern.

EXERCISE 7-13 (20-25 minutes)

(a) Interest bearing note – Option 1:

September 30, 2014		
Notes Receivable.....	105,000	
Accounts Receivable		105,000
December 31, 2014		
Interest Receivable	2,100	
Interest Income.....		2,100
(\$105,000 X 8% X 3/12)		
September 30, 2015		
Cash	113,400	
Interest Receivable.....		2,100
Interest Income.....		6,300
Notes Receivable.....		105,000
(\$105,000 X 8% X 9/12 = \$6,300)		

(b) Non-interest bearing note – Option 2:

September 30, 2014		
Notes Receivable.....	105,000	
Accounts Receivable		105,000
December 31, 2014		
Notes Receivable.....	2,100	
Interest Income.....		2,100
(\$105,000 X 8% X 3/12)		
September 30, 2015		
Notes Receivable.....	6,300	
Interest Income.....		6,300
(\$105,000 X 8% X 9/12)		
Cash	113,400	
Notes Receivable.....		113,400

EXERCISE 7-13 (Continued)

- (c) There is no difference in the amount of interest income earned in 2014 and 2015 because both options bear interest at 8%. The “non-interest bearing” note has the interest included in the face amount of the note and is journalized to account for this. The actual interest earned is the same under both options.**

- (d) The liquidity of Big Corp. at December 31, 2014 will remain unchanged whichever option is selected. Under option 1, the note balance remains at \$105,000 but interest receivable of \$2,100 results in a total of \$107,100 under current assets. Under Option 2, the balance of the note, after recording the accrual of interest income is also \$107,100 under current assets. The cash flows will also be the same under both options as the amount collected at the maturity of the note is \$113,400.**

EXERCISE 7-14 (15-20 minutes)

(a)

September 1, 2014

Notes Receivable.....	31,250	
Sales Revenue.....		31,250

Calculation of the present value of the note:

Maturity value	35,000
Present value of \$35,000 due in 1 year at 12%—\$35,000 X .89286	<u>31,250</u>
Discount	<u>\$3,750</u>

Using a financial calculator:

PV	?	Yields \$ (31,250)
I	12%	
N	1	
PMT	-	
FV	\$ 35,000	
Type	0	

Excel formula: =PV(rate,nper,pmt,fv,type)

December 31, 2014

Notes Receivable.....	1,250	
Interest Income..... (\$ 31,250 X 12% X 4/12)		1,250

EXERCISE 7-14 (Continued)

September 1, 2015

Notes Receivable.....	2,500	
Interest Income.....		2,500
(\$ 31,250 X 12% X 8/12)		

Cash	35,000	
Notes Receivable.....		35,000

(b)

Cash	28,000	
Loss on Impairment	4,500	
Notes Receivable.....		32,500
(\$ 28,000 = 35,000 X 80%) (Note: this assumes that the entry to accrue interest for Jan – Sept 1, 2014 has not been recorded).		

(c) To decrease collection risk, Myo could have:

1. Required cash on delivery (COD) for at least a portion of the order
2. Required instalment payments (instead of one lump-sum payment in one year)
3. Applied more rigorous collection procedures, including frequent phone calls to Khin to determine any changes in credit risk associated with the note receivable
4. Referred collection of the note receivable to an external collection agency.

EXERCISE 7-15 (30-35 minutes)

1. Notes Receivable.....	700,000	
Land		590,000
Gain on Sale of Land.....		110,000
(\$700,000 – \$590,000)		
 \$1,101,460	Face value of note	
<u>.63552</u>	Present value of 1 for 4 periods at 12%	
700,000	Present value of note	
<u>1,101,460</u>	Face value of note	
<u>\$ 401,460</u>	Discount on note receivable	

Using a financial calculator:

PV	?	yields \$(699,998)
I	12%	
N	4	
PMT	-	
FV	\$ 1,101,460	
Type	0	

Excel formula: =PV(rate,nper,pmt,fv,type)

EXERCISE 7-15 (Continued)

2. Notes Receivable.....	221,164	
Service Revenue		221,164

Calculation of the present value of the note:

Maturity value		400,000
Present value of \$400,000 due in 8 years at 12%—\$400,000 X .40388	\$161,552	
Present value of \$12,000 payable annually for 8 years at 12% annually—\$12,000 X 4.96764	<u>59,612</u>	
Present value of the note and interest		<u>221,164</u>
Discount		<u>\$178,836</u>

Using a financial calculator:

PV	?	Yields \$ (221,165)
I	12%	
N	8	
PMT	\$ 12,000	
FV	\$ 400,000	
Type	0	

Excel formula: =PV(rate,nper,pmt,fv,type)

EXERCISE 7-15 (Continued)

3.

Notes Receivable	63,397	
Accounts Receivable		63,397

Calculation of the present value of
the note:

Present value of \$20,000	
payable annually for 4 years at	
10% annually—\$20,000 X	
3.16986	63,397

Using a financial calculator:

PV	?	Yield	\$(63,397)
I	10%		
N	4		
PMT	\$20,000		
FV	-		
Type	0		

Excel formula: =PV(rate,nper,pmt,fv,type)

(b)

Effective Interest Table Instalment Note Receivable

Debit Cash Credit Notes Receivable	Credit Interest Income Debit Notes Receivable	Carrying Amount of Note
		\$63,397
\$20,000	\$6,340	49,737
20,000	4,974	34,711
20,000	3,471	18,182
20,000	1,818	—

EXERCISE 7-15 (Continued)

From the perspective of Agincourt, an instalment note reduces the risk of non-collection when compared to a non-interest-bearing note. In the case of the non-interest-bearing note, the full amount is due at the maturity of the note. The instalment note provides a regular reduction of the principal balance in every payment received annually. This is demonstrated in the effective interest table illustrated above for the instalment note.

EXERCISE 7-16 (15-20 minutes)

(a)	Notes Receivable	159,438	
	Service Revenue		159,438*

Using a financial calculator:

PV	?	Yields \$ (159,439)
I	12%	
N	2	
PMT	0	
FV	\$ 200,000	
Type	0	

Excel formula:

=PV(rate,nper,pmt,fv,type)

*Present value of note:

PV of \$200,000 due in 2 years at 12%

\$200,000 X .79719 = \$159,438

(b)	Notes Receivable	19,133	
	Interest Income		19,133*

*\$159,438 X 12% = \$19,133

(c)	Notes Receivable	21,429*	
	Interest Income		21,429

*((\$159,439 + \$19,133) X 12% = \$21,429

	Cash	200,000	
	Notes Receivable		200,000

- (d) The balance of the note at December 31, 2014 is \$178,571 (\$200,000 less discount balance of \$21,429). The note would be classified as a current asset on the balance sheet as the maturity date of the note of December 31, 2015 is within the next fiscal year.

EXERCISE 7-16 (continued)

- (e) Fair value of the consulting services provided can be used to value and record the transaction, instead of fair value of the note received.**

EXERCISE 7-17 (10-15 minutes)

(a)	Cash	188,000	
	Finance Expense (400,000 X 3%)	12,000	
	Notes Payable		200,000
(b)	Cash	350,000	
	Accounts Receivable		350,000
(c)	Notes Payable	200,000	
	Interest Expense	5,000	
	Cash		205,000
	(\$200,000 X 10% X 3/12)		

EXERCISE 7-18 (15-18 minutes)

1.	Cash	18,000	
	Loss on Sale of Receivables		
	(\$20,000 X 10%)	2,000	
	Accounts Receivable		20,000
2.	Cash	50,600	
	Finance Expense (\$55,000 X 8%)	4,400	
	Notes Payable		55,000
3.	Bad Debt Expense.....	5,850	
	Allowance for Doubtful Accounts		
	[((\$82,000 X 5%) + \$1,750)]		5,850
4.	Bad Debt Expense.....	6,450	
	Allowance for Doubtful Accounts		
	(\$430,000 X 1.5%)		6,450

EXERCISE 7-19 (15-20 minutes)

(a) To be recorded as a sale under IFRS, all of the following conditions must be met:

1. The transferred assets have been isolated from the transferor (put beyond reach of the transferor and its creditors even in bankruptcy or receivership).
2. The transferee has obtained the right to pledge or to sell either the transferred assets or beneficial interests in the transferred assets.

(b) Calculation of net proceeds:

Cash received ($\$600,000 \times 92.25\%$)	\$553,500	
Due from factor ($\$600,000 \times 5.25\%$)	<u>31,500</u>	\$585,000
Less: Recourse obligation		<u>6,000</u>
Net proceeds		<u>\$579,000</u>

Calculation of gain or loss:

Carrying amount of receivables	\$600,000
Net proceeds	<u>579,000</u>
Loss on sale of receivables	<u>\$ 21,000</u>

Note: Loss on sale of receivables can also be calculated as the finance expense assessed plus the fair value of the recourse obligation (in this case, $[\$600,000 \times 2.5\%] + \$6,000 = \$21,000$).

EXERCISE 7-19 (Continued)

The following journal entry would be recorded on August 15, 2014:

Cash	553,500	
Due from Factor	31,500	
Loss on Sale of Receivables	21,000	
Recourse Liability		6,000
Accounts Receivable		600,000

(c) Factoring the accounts receivable will improve the accounts receivable turnover ratio, if it were calculated on August 15, 2014, immediately after recording the entry in (b) above. The balance of accounts receivable used in the denominator will be reduced by the average of \$600,000 and any amounts factored at the other date(s) used in determining the average accounts receivable, thereby making the ratio higher. If, on the other hand, the calculation is made well after the factoring transaction, for example, at the fiscal year end, the balances of sales and average accounts receivable would be unaffected by this transaction and therefore the accounts receivable turnover ratio would not be affected.

(d) To be recorded as a sale under ASPE, all of the following conditions must be met:

1. The transferred assets have been isolated from the transferor (put beyond reach of the transferor and its creditors even in bankruptcy or receivership).
2. The transferee has obtained the right to pledge or to sell either the transferred assets or beneficial interests in the transferred assets.
3. The transferor does not maintain effective control over the transferred assets through an agreement to repurchase or redeem them before their maturity.

EXERCISE 7-20 (15-20 minutes)

(a) Calculation of net proceeds:

Cash received (\$355,000 X 96%)		\$340,800
Less: Recourse obligation	\$9,900	
Less: Unrecovered Service Costs	<u>12,500</u>	<u>22,400</u>
Net proceeds		<u>\$318,400</u>

Calculation of gain or loss:

Carrying amount of receivables	\$355,000
Net proceeds	<u>318,400</u>
Loss on sale of receivables	<u>\$ 36,600</u>

The following journal entry would be made:

Cash	340,800	
Loss on Sale of Receivables	36,600	
Recourse Liability		9,900
Accrued Liabilities.....		12,500
Accounts Receivable		355,000

- (b) The securitization of accounts receivable transaction will improve the accounts receivable turnover ratio, if it were calculated on July 11, 2014, immediately after recording the entry in (a) above. The balance of accounts receivable used in the denominator will be reduced by the average of \$355,000 and any amounts securitized at the other date(s) used in determining the average accounts receivable, thereby making the ratio higher. If, on the other hand, the calculation is made well after the securitization transaction, for example, at the fiscal year end, the balances of sales and average accounts receivable would be unaffected by this transaction and therefore the accounts receivable turnover ratio would not be affected.

EXERCISE 7-21 (10-15 minutes)

(a) Cash	210,000	
Accounts Receivable	200,000	
Sales Revenue		410,000

Cash	140,000	
Accounts Receivable		140,000

(b) Accounts Receivable Turnover =
$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}}$$

Using credit sales

$$= \frac{\$200,000}{(\$25,000 + \$85,000)/2}$$

3.64 times
or about 100 days

- (c) Patuanak Company's accounts receivable turnover ratio has declined. That is, relative to sales, their receivables are being collected at a slower rate ($3.64 < 4.85$) or 100 days to collect versus 75 days in the prior year. This could be a bad trend for future liquidity, if customers continue to pay slowly. Jones may want to consider offering early payment (cash) discounts.

Credit sales are a better measure in the calculation of accounts receivable turnover ratio since cash sales do not affect accounts receivable balances and therefore could be the cause of a biased interpretation of the speed at which accounts receivable are collected.

It should be noted that credit sales are not always available when performing analysis and calculating the accounts receivables turnover ratio. When not available, the figure of net sales should be used. As long as the calculation is done consistently between years, or between businesses, the comparison will remain fair.

EXERCISE 7-22 (10-15 minutes)

(a)

Accounts Receivable Turnover =	Sales (All Revenues)
	Average Receivables
2011 =	\$3,893,667
	(\$146,753 + \$90,137)/2
=	32.87 times
	or about 11.1 days
2010 =	\$3,918,790
	(\$90,137 + \$63,669)/2
=	50.96 times
	or about 7.2 days

- (b) The accounts receivable turnover ratio has decreased from 50.96 times to 32.87 times in a single year. The disproportionately low balance in accounts receivable at April 30, 2009 (about a third of the balance as of April 30, 2011) can explain the reason for this. Based also on the information concerning the levels of revenue from the company's single largest tenant, Becker is economically dependent on this particular tenant and is likely negotiating special terms for payment, which can significantly affect the balance of accounts receivable at any point in time. Consequently, the accounts receivable turnover ratio may not be a useful tool in determining management's effectiveness in collecting and turning over accounts receivable in general.
- (c) Based also on the information concerning the levels of revenue from the company's single largest tenant, Becker is economically dependent on this particular tenant. The principle of full disclosure would require this information to be disclosed.

***EXERCISE 7-23 (5-10 minutes)**

(a)	Jan. 1	Petty Cash	200.00	
		Cash.....		200.00
	Jan. 22	Cash Over and Short	1.08	
		Supplies Expense	9.50	
		Delivery Expense	25.00	
		Advances to Employees.....	100.00	
		Miscellaneous Expense.....	28.02	
		Cash (\$200.00 – \$36.40).....		163.60
	June	Petty Cash	100.00	
		Cash.....		100.00

- (b) The petty cash would be reported under “Cash” on the balance sheet.**
- (c) Many companies have a policy of reimbursing the petty cash fund at the balance sheet date to: ensure that all transactions are recorded at year end, provide for an additional reconciliation of the account, and identify any errors in the petty cash fund and cash overages/shortages prior to preparing the financial statements.**

***EXERCISE 7-24 (15-20 minutes)**

(a)

Calculation of outstanding deposits

Deposits per books		\$5,810
Deposits per bank in May	\$5,000	
Less deposits in transit (April)	<u>(1,540)</u>	
Deposits made and processed in May		<u>(3,460)</u>
Outstanding deposits, May 31		<u><u>\$2,350</u></u>

Calculation of outstanding cheques

Cheques written per books		\$3,100
Cheques cleared by bank in May	\$4,000	
Less outstanding cheques (April)*	<u>(2,000)</u>	
Cheques written and cleared in May		<u>(2,000)</u>
Outstanding cheques, May 31		<u><u>\$1,100</u></u>

***Assumed to clear bank in May**

(b)

**Ling Company
Bank Reconciliation
May 31**

Balance per bank statement, May 31		\$8,760
Add: Outstanding deposits (deposits in transit)		2,350
Deduct: Outstanding cheques		<u>(1,100)</u>
Correct cash balance, May 31		<u><u>\$10,010</u></u>
Balance per books, May 31		\$9,370
Add: Collection of note		1,000
Less: Bank service charge	\$ 25	
NSF cheque	<u>335</u>	<u>(360)</u>
Correct cash balance, May 31		<u><u>\$10,010</u></u>

(c) Cash	640	
Office Expense	25	
Accounts Receivable	335	
Notes Receivable.....		1,000

***EXERCISE 7-25 (15-20 minutes)**

**(a) Eli Corp.
Bank Reconciliation, August 31, 2014
Provincial Bank of Manitoba**

Balance per bank statement, Aug. 31, 2014		\$ 8,089
Add: Cash on hand	\$ 310	
Deposits in transit	<u>3,800</u>	<u>4,110</u>
		12,199
Deduct: Outstanding cheques		<u>1,050</u>
Correct cash balance		<u><u>\$11,149</u></u>
Balance per books, August 31, 2014 (\$10,050 + \$35,000 – \$34,903)		\$10,147
Add: Note (\$1,000) and interest (\$40) Collected		<u>1,040</u>
		11,187
Deduct: Bank service charges	\$ 20	
Understated cheque for supplies	<u>18</u>	<u>38</u>
Correct cash balance		<u><u>\$11,149</u></u>

(b) Cash	1,040	
Notes Receivable.....		1,000
Interest Income.....		40
(To record collection of note and interest)		
Office Expense - Bank Charges	20	
Cash		20
(To record August bank charges)		
Supplies Expense.....	18	
Cash		18
(To record error in recording cheque for supplies)		

(c) The corrected cash balance of \$11,149 would be reported on the August 31, 2014 balance sheet.

TIME AND PURPOSE OF PROBLEMS

Problem 7-1 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the balance sheet effect that occurs when the cash book is left open. In addition, the student is asked to adjust the present balance sheet to an adjusted balance sheet, reflecting the proper cash presentation.

Problem 7-2 (Time 20-25 minutes)

Purpose—to provide the student with the opportunity to determine various items related to accounts receivable and the allowance for doubtful accounts. Five independent situations are provided.

Problem 7-3 (Time 20-30 minutes)

Purpose—to provide a short problem related to the aging of accounts receivable. The appropriate balance for allowance for doubtful accounts must be determined. In addition, the manner of reporting accounts receivable on the balance sheet must be shown.

Problem 7-4 (Time 25-35 minutes)

Purpose—the student prepares an analysis of the changes in the allowance for doubtful accounts and supports it with an aging schedule. The adjusting entry is prepared.

Problem 7-5 (Time 25-35 minutes)

Purpose—a problem that must be analyzed to make the necessary correcting entries. This is a good problem for indicating the types of adjustments that might occur with respect to receivables.

Problem 7-6 (Time 20-25 minutes)

Purpose—to provide the student with a number of business transactions related to accounts receivable that must be journalized. Recoveries of receivables, and writeoffs are the types of transactions presented. The problem provides a good cross section of a number of accounting issues related to receivables.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 7-7 (Time 20-30 minutes)

Purpose—a short problem involving the entries for a simple note receivable carrying a fair interest rate over a term of two years. One set of entries are prepared without the use of reversing entries and the second set uses reversing entries.

Problem 7-8 (Time 30-35 minutes)

Purpose—to provide the student with a problem requiring the imputation of interest. The student is required to make journal entries on a series of dates when note instalments are collected. Bond discount amortization is also involved.

Problem 7-9 (Time 40-50 minutes)

Purpose—the student calculates cash flows, the current portion of long-term receivables and interest receivable, and prepares the long-term receivables section of the balance sheet. Then the student prepares a schedule showing interest income. The problem includes interest-bearing and zero-interest-bearing notes and an instalment receivable.

Problem 7-10 (Time 25-35 minutes)

Purpose—to provide the student the opportunity to prepare entries for a factoring transaction and assess impact on ratios.

Problem 7-11 (Time 15-20 minutes)

Purpose—to provide the student the opportunity to determine the income effects of the sales of receivables with and without recourse and the pledging of accounts receivable.

Problem 7-12 (Time 25-30 minutes)

Purpose—the student prepares an accounts receivable aging schedule, calculates the amount of the adjustment, and prepares the journal entry to adjust the allowance. The student is asked to identify steps to improve collection and evaluate each step in terms of risks and costs involved.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 7-13 (Time 30-35 minutes)

Purpose—this is a comprehensive problem, which allows the student the opportunity to derive the balance of accounts receivable and the allowance for doubtful accounts at the end of the fiscal year. The student must first deal with the treatment of several transactions for the fiscal year that affect these accounts. Factoring receivables, accruing for bad debts and accepting a note in payment transactions are also involved in this problem. Finally some ratio analysis is performed by the student.

*Problem 7-14 (Time 20-25 minutes)

Purpose—to provide the student with the opportunity to account for petty cash and to prepare a bank reconciliation.

*Problem 7-15 (Time 20-30 minutes)

Purpose—to provide the student with the opportunity to prepare a bank reconciliation. Traditional types of adjustments are presented. Journal entries are also required.

*Problem 7-16 (Time 20-30 minutes)

Purpose—to provide the student with the opportunity to prepare a bank reconciliation, which goes from balance per bank to corrected balance. Traditional types of adjustments are presented such as deposits in transit, bank service charges and NSF cheques. Journal entries are also required.

*Problem 7-17 (Time 25-35 minutes)

Purpose—to provide the student with the opportunity to prepare a bank reconciliation, which goes from balance per bank to corrected balance. Parts of the original documents are provided to the students and they have to abstract the data from these documents.

SOLUTIONS TO PROBLEMS

PROBLEM 7-1

(a)	December 31		
Accounts Receivable		14,230	
Sales Revenue		25,300	
Cash			38,900
Sales Discounts			630

	December 31		
Cash		24,330	
Purchase Discounts		520	
Accounts Payable			24,850

(b)	Per balance sheet	After Adj.
Current assets		
Cash (\$39,000 – \$38,900 + \$24,330)	\$ 39,000	\$ 24,430
Accounts Receivable (\$42,000 + \$14,230)	42,000	56,230
Inventory	<u>67,000</u>	<u>67,000</u>
Total	<u>148,000</u>	<u>147,660</u>
Current liabilities		
Accounts payable (\$45,000 + \$24,850)	45,000	69,850
Accrued liabilities	<u>14,200</u>	<u>14,200</u>
Total	<u>59,200</u>	<u>84,050</u>
Working capital	<u>\$ 88,800</u>	<u>\$ 63,610</u>
Current ratio	2.5 to 1	1.76 to 1

PROBLEM 7-1 (Continued)

- (c) Dev is preparing financial statements for credit purposes. Key users including creditors and/or potential lenders will rely on Dev's financial statements in making their investment decisions. In particular, key users will assess Dev's liquidity, solvency, and ability to service obligations. The practice of holding the cash book open after year end and showing a more favourable financial position (and more favourable liquidity) is an example of "window dressing", or presenting the accounts in a way that presents a stronger financial position or stronger financial performance than actual. Window dressing is unethical because the resulting financial statements are biased and misleading. The results of unethical behaviour can include severe loss of reputation, civil action against the company, and criminal action for fraudulent behaviour.**

PROBLEM 7-2

(a)	Sales	\$1,980,000
	Sales discounts	4,400
	Sales returns and allowances	<u>60,000</u>
	Net sales	1,915,600
	Percentage	<u>1 1/2%</u>
	Bad debt expense	<u>\$ 28,734</u>
(b)	Accounts receivable	\$1,790,000
	Amounts estimated to be uncollectible	<u>(160,000)</u>
	Net realizable value	<u>\$1,630,000</u>
(c)	Allowance for doubtful accounts 1/1/14	\$37,000
	Establishment of accounts written off in prior years (recovery)	18,000
	Customer accounts written off in 2014	(36,000)
	Bad debt expense for 2014 (\$3,200,000 X 4.5%)	<u>144,000</u>
	Allowance for doubtful accounts 12/31/14	<u>\$163,000</u>
(d)	Bad debt expense for 2014	\$92,000
	Customer accounts written off as uncollectible during 2014	<u>(24,000)</u>
	Allowance for doubtful accounts balance 12/31/14	<u>\$68,000</u>
	Accounts receivable, net of allowance for doubtful accounts	\$ 950,000
	Allowance for doubtful accounts balance 12/31/14	<u>68,000</u>
	Accounts receivable, before deducting allowance for doubtful accounts	<u>\$1,018,000</u>

PROBLEM 7-2 (Continued)

(e) Accounts receivable	\$610,000
Percentage	<u>7%</u>
Allowance for doubtful accounts (ending bal.)	<u>42,700</u>
Allowance for doubtful accounts (debit bal.)	<u>34,000</u>
Bad debt expense	<u><u>\$ 76,700</u></u>

PROBLEM 7-3

- (a)
- | | |
|------------------------------------|--------------------|
| Opening balance | \$ 475,000 |
| Credit sales in year | 6,675,000 |
| Accounts written off | (35,500) |
| Reinstatement of account collected | 4,000 |
| Cash collected on account | <u>(6,568,500)</u> |
| Ending balance | <u>\$ 550,000</u> |
- (b) The Allowance for Doubtful Accounts should have a balance of \$54,860 at year end. The supporting calculations are shown below:

Days Account Outstanding	Amount	Expected Percentage Uncollectible	Estimated Uncollectible
0-15 days	\$270,000	.03	\$8,100
16-30 days	117,000	.08	9,360
31-45 days	80,000	.20	16,000
46-60 days	38,000	.30	11,400
61-75 days	20,000	.50	<u>10,000</u>

Balance for Allowance for Doubtful Accounts \$54,860

The accounts which have been outstanding over 75 days (\$25,000) and have zero probability of collection would be written off immediately and not be considered when determining the proper amount for the Allowance for Doubtful Accounts. Therefore, the Accounts Receivable and the Allowance account should both be reduced by \$25,000.

Balance in Allowance for Doubtful Accounts before year-end adjusting entry:

$$\begin{aligned} &\$33,000 + (0.5\% \times \$6,675,000) - \$35,500 + \$4,000 - \$25,000 = \\ &\qquad\qquad\qquad \$ 9,875 \text{ cr} \end{aligned}$$

Correct balance of Allowance account (see above)	<u>54,860 cr</u>
Amount needed for adjustment	<u><u>\$44,985 cr</u></u>

PROBLEM 7-3 (Continued)

	December 31	
Bad Debt Expense	44,985	
 Allowance for Doubtful Accounts		44,985
 (c) Accounts Receivable (\$550,000 - \$25,000)	\$525,000	
Less allowance for doubtful accounts.....	<u>54,860</u>	
 Accounts receivable (net).....		<u>\$470,140</u>
(d) The year end bad debt adjustment would decrease before-tax income \$44,985 as calculated below:		
 Estimated amount required in the Allowance for Doubtful Accounts		\$54,860
Balance in the account after write-off of bad accounts but before adjustment (see above)		
		<u>9,875</u>
Required charge to expense		<u>\$44,985</u>

PROBLEM 7-4

(a)

Balance at January 1, 2014	\$184,000
Bad debt expense accrued in 2014 (\$9,400,000 X 2.5%)	235,000
Recovery of bad debts in 2012 previously written off	<u>15,000</u>
	434,000
Deduct writeoffs for 2014 (\$95,000 + \$69,000)	<u>164,000</u>
Balance at December 31, 2014 before change in accounting estimate	270,000
Increase due to change in accounting estimate during 2014	<u>30,250</u>
Balance at December 31, 2014 adjusted (Schedule 1)	<u><u>\$300,250</u></u>

Schedule 1

**Calculation of Allowance for Doubtful Accounts
at December 31, 2014**

<u>Aging category</u>	<u>Balance</u>	<u>%</u>	<u>Doubtful accounts</u>
Nov – Dec. 2014	\$1,080,000	8	\$ 86,400
July – Oct.	650,000	12.5	81,250
Jan – Jun.	420,000	20	84,000
Prior to 1/1/14	81,000*	60	<u>48,600</u>
			<u><u>\$300,250</u></u>

***\$150,000 – \$69,000**

PROBLEM 7-4 (Continued)

(b) **Campbell Corporation**
Journal Entry
December 31, 2014

Account	Dr.	Cr.
Bad Debt Expense	30,250	
 Allowance for Doubtful Accounts		30,250
(To increase the allowance for doubtful accounts at December 31, 2014, resulting from a change in accounting estimate)		

PROBLEM 7-5

Bad Debt Expense	2,740	
Accounts Receivable		2,740
(To correct bad debt expense and write off accounts receivable)		

Accounts Receivable	4,840	
Unearned Revenue		4,840
(To reclassify credit balance in accounts receivable)		

Allowance for Doubtful Accounts	4,200	
Accounts Receivable		4,200
(To write off \$4,200 of uncollectible accounts)		

(Note to instructor: Many students will not make this entry at this point. Because \$4,200 is totally uncollectible, a write off immediately seems most appropriate. The remainder of the solution therefore assumes that the student made this entry.)

Allowance for Doubtful Accounts	7,975	
Bad Debt Expense		7,975
(To reduce allowance for doubtful account balance)		

Balance (\$8,750 + \$18,620 – \$2,740 – \$4,200)	\$20,430
Corrected balance (see below)	<u>12,455</u>
Adjustment	<u>\$ 7,975</u>

Age	Balance	Aging Sch.	
Under 60 days	\$172,342	1%	\$ 1,723.42
61-90 days	141,330 (\$136,490 + \$4,840)	3%	4,239.90
91-120 days	37,184 (\$39,924 – \$2,740)	7%	2,602.88
Over 120 days	19,444 (\$23,644 – \$4,200)	20%	<u>3,888.80</u>
			<u>\$12,455.00</u>

PROBLEM 7-5 (Continued)

If the student did not make the entry to record the \$4,200 writeoff earlier, the following would change in the problem. After the adjusting entry for \$7,975, an entry would have to be made to write off the \$4,200.

Balance (\$8,750 + \$18,620 – \$2,740)	\$24,630
Corrected balance (see below)	<u>16,655</u>
Adjustment	<u>\$ 7,975</u>

Age	Balance	Aging Schedule	
Under 60 days	\$172,342	1%	\$ 1,723.42
61-90 days	141,330	3%	4,239.90
91-120 days	37,184	7%	2,602.88
Over 120 days	23,644	—	<u>8,088.80*</u>
			<u>\$16,655.00</u>

*\$4,200 + (20% X \$19,444)

PROBLEM 7-6

-1-

Cash	137,200	
Sales Discounts	800	
Accounts Receivable		138,000

-2-

Accounts Receivable	6,700	
Allowance for Doubtful Accounts		6,700

Cash	6,700	
Accounts Receivable		6,700

-3-

Allowance for Doubtful Accounts	19,500	
Accounts Receivable		19,500

-4-

Bad Debt Expense	16,500	
Allowance for Doubtful Accounts		16,500
(\$17,300 + \$6,700 – \$19,500 = \$4,500; \$21,000 – \$4,500 = \$16,500)		

PROBLEM 7-7

(a)

October 1, 2014			
Notes Receivable	150,000		
Sales Revenue			150,000
December 31, 2014			
Interest Receivable	3,750		
Interest Income			3,750
(\$150,000 X 10% X 3/12)			
October 1, 2015			
Cash	15,000		
Interest Receivable			3,750
Interest Income			11,250
(\$150,000 X 10% X 9/12)			
December 31, 2015			
Interest Receivable	3,750		
Interest Income			3,750
(\$150,000 X 10% X 3/12)			
October 1, 2016			
Cash	165,000		
Interest Receivable			3,750
Interest Income			11,250
Notes Receivable			150,000
(\$150,000 X 10% X 9/12 = \$11,250)			

PROBLEM 7-7 (Continued)

(b)

	October 1, 2014		
Notes Receivable	150,000		
Sales Revenue			150,000
	December 31, 2014		
Interest Receivable	3,750		
Interest Income			3,750
(\$150,000 X 10% X 3/12)			
	January 1, 2015		
Interest Income	3,750		
Interest Receivable			3,750
	October 1, 2015		
Cash	15,000		
Interest Income			15,000
	December 31, 2015		
Interest Receivable	3,750		
Interest Income			3,750
(\$150,000 X 10% X 3/12)			
	January 1, 2016		
Interest Income	3,750		
Interest Receivable			3,750
	October 1, 2016		
Cash	165,000		
Interest Income			15,000
Notes Receivable			150,000

PROBLEM 7-8

(a)

1.

December 31, 2014

Cash	36,000.00	
Notes Receivable	55,844.10	
Service Revenue		91,844.10

Using a financial calculator:

PV	?	Yields \$ (55,844)
I	11%	
N	4	
PMT	\$18,000	
FV	0	
Type	0	

Excel formula: =PV(rate,nper,pmt,fv,type)

To record revenue at the present value of the note plus the immediate cash payment:

PV of \$18,000 annuity

@ 11% for 4 years (\$18,000 X 3.10245) \$55,844.10

Down payment 36,000.00

Capitalized value of services \$91,844.10

2.

December 31, 2015

Cash	18,000.00	
Notes Receivable		18,000.00
Notes Receivable	6,142.85	
Interest Income		6,142.85

PROBLEM 7-8 (Continued)

Schedule of Note Receivable Amortization

Date	Debit, Notes Receivable / Credit, Interest Income	Instalment Paid	Present Value of Note
12/31/14	—	—	\$55,844.10
12/31/15	\$6,142.85 ^a	\$18,000.00	43,986.95 ^b
12/31/16	4,838.56	18,000.00	30,825.51
12/31/17	3,390.81	18,000.00	16,216.32
12/31/18	1,783.68 ^c	18,000.00	—

^a\$6,142.85 = \$55,844.10 X 11%

^b\$43,986.95 = \$55,844.10 + \$6,142.85 – \$18,000.00

^cRounded by \$.12

3. December 31, 2016

Cash	18,000.00	
Notes Receivable		18,000.00
Notes Receivable	4,838.56	
Interest Income		4,838.56

4. December 31, 2017

Cash	18,000.00	
Notes Receivable		18,000.00
Notes Receivable	3,390.81	
Interest Income		3,390.81

5. December 31, 2018

Cash	18,000.00	
Notes Receivable		18,000.00
Notes Receivable	1,783.68	
Interest Income		1,783.68

PROBLEM 7-8 (Continued)

- (b) From the perspective of Zhang, an instalment note reduces the risk of non-collection when compared to a non-interest-bearing note. For a non-interest-bearing note, the full amount is due at the maturity of the note. An instalment note provides a regular reduction of the principal balance in every payment received annually. This is demonstrated in the schedule of note receivable amortization. In addition, receiving cash earlier enables it to be used for other purposes.**

PROBLEM 7-9

(a) 1. Cash inflows from notes:

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
9% Note receivable					
Principal	\$600,000	\$600,000	\$600,000		
Interest*	162,000	108,000	54,000		
8% Note receivable					
Principal			400,000		
Interest	32,000	32,000	32,000		
Non-interest-bearing note receivable					
Payment			\$200,000		
Instalment contract receivable					
Downpayment	60,000				
Payments		45,125	45,125	45,125	45,125
	<u>\$854,000</u>	<u>\$785,125</u>	<u>\$1,331,125</u>	<u>\$45,125</u>	<u>\$45,125</u>

*** 9% Note receivable interest payment calculations:**

2014: \$1,800,000 X 9% = \$162,000

2015: (\$1,800,000 - \$600,000) X 9% = \$108,000

2016: (\$1,800,000 - \$600,000 - \$600,000) X 9% = \$54,000

PROBLEM 7-9 (Continued)

2. Interest Income reported in 2014:

Note Receivable—Sale of Division

Interest earned – 1/1 to 5/1/2014

$(\$1,800,000 \times 9\% \times 4/12)$ \$ 54,000

Interest earned – 5/1 to 12/31/2014

$(\$1,200,000 \times 9\% \times 8/12)$ 72,000 \$ 126,000

Note Receivable—Employees

Interest earned 1/1 to 12/31/2014

$(\$400,000 \times 8\%)$ 32,000

Zero-interest-bearing Note—Patent

Face amount 4/1/14 \$200,000

Less imputed interest

$[\$200,000 - (\$200,000 \times 0.79719)]$ 40,562

Balance, 4/1/2014 159,438

Interest earned to 12/31/2014

$(\$159,438 \times 12\% \times 9/12)$ 14,349

Instalment Contract—Sale of Land

Interest accrued from 7/1 to 12/31/2014

$(\$140,000 \times 11\% \times 6/12)$ 7,700

Total Interest Income reported in 2014 \$180,049

3. Notes and interest reported as current assets:

Current portion of notes receivable

—Sale of Division \$600,000 (1)

Accrued interest on note—Sale of

Division, from 5/1 to 12/31/2014

$(\$1,200,000 \times 9\% \times 8/12)$ 72,000 672,000

Current portion of instalment contract 29,725 (3)

Accrued interest—Instalment contract 7,700 37,425

Total current notes and interest \$709,425

PROBLEM 7-9 (Continued)

4. Notes and interest reported as long-term investments:

Note receivable—Sale of Division	\$600,000 (1)
Note receivable—Employees	400,000
Zero-interest-bearing Note—Patent	173,787 (2)
Instalment Contract—Sale of Land	<u>110,275 (3)</u>
Total long-term investment	<u>\$1,284,062</u>

(b) **Desrosiers Ltd.**
Long-Term Receivables Section of Balance Sheet
December 31, 2014

9% note receivable from sale of division, due in annual instalments of \$600,000 to May 1, 2016, less current instalment	\$600,000 (1)
8% note receivable from officer, due Dec. 31, 2016, collateralized by 10,000 shares of Desrosiers Ltd., common shares with a fair value of \$450,000	400,000
Zero-interest-bearing note from sale of patent, net of 12% imputed interest, due April 1, 2016	173,787 (2)
Instalment contract receivable, due in annual instalments of \$45,125 to July 1, 2018, less current instalment	<u>110,275 (3)</u>
Total long-term receivables	<u>\$1,284,062</u>

PROBLEM 7-9 (Continued)

(c) **Desrosiers Ltd.**
Selected Balance Sheet Balances
December 31, 2014

Current portion of long-term receivables:		
Note receivable from sale of division	\$600,000	(1)
Instalment contract receivable	<u>29,725</u>	(3)
Total current portion of long-term receivables	<u>\$629,725</u>	
 Accrued interest receivable:		
Note receivable from sale of division	\$72,000	(4)
Instalment contract receivable	<u>7,700</u>	
Total accrued interest receivable	<u>\$79,700</u>	

(d) **Desrosiers Ltd.**
Interest Income from Long-Term Receivables
For the Year Ended December 31, 2014

Interest income:		
Note receivable from sale of division	\$126,000	
Note receivable from sale of patent	14,349	(2)
Note receivable from employee	32,000	
Instalment contract receivable from sale of land	<u>7,700</u>	
Total interest income for year ended 12/31/14	<u>\$180,049</u>	

Explanation of Amounts

1. Long-term Portion of 9% Note Receivable
at 12/31/2014

Face amount, 5/1/2013	\$1,800,000
Less instalment received 5/1/2014	<u>600,000</u>
Balance, 12/31/2014	1,200,000
Less instalment due 5/1/2015	<u>600,000</u>
Long-term portion, 12/31/2014	<u>\$ 600,000</u>

PROBLEM 7-9 (Continued)

2. Zero-interest-bearing Note, Net of Imputed Interest at 12/31/2014

Face amount 4/1/2014	\$ 200,000
Less imputed interest	
[\$200,000 – (\$200,000 X 0.79719)]	<u>40,562</u>
Balance, 4/1/2014	159,438
Add interest earned to 12/31/2014	
(\$159,438 X 12% X 9/12)	<u>14,349</u>
Balance, 12/31/2014	<u><u>\$ 173,787</u></u>

3. Long-term Portion of Instalment Contract Receivable at 12/31/10

Contract selling price, 7/1/2014	\$ 200,000
Less down payment, 7/1/2014	<u>60,000</u>
Balance, 12/31/14	140,000
Less instalment due, 7/1/2015	
[\$45,125 – (\$140,000 X 11%)]	<u>29,725</u>
Long-term portion, 12/31/2014	<u><u>\$ 110,275</u></u>

4. Accrued Interest—Note Receivable, Sale of Division at 12/31/2014

Interest accrued from 5/1 to 12/31/2014	
(\$1,200,000 X 9% X 8/12)	<u><u>\$ 72,000</u></u>

PROBLEM 7-10

Part I

(a)	Cash	250,000	
	Accounts Receivable	215,000	
	Sales Revenue		465,000
	Notes Receivable	50,000	
	Accounts Receivable		50,000
	Cash	160,000	
	Accounts Receivable		160,000
12/31	Interest Receivable	2,750	
	Interest Income		2,750
	(\$50,000 X 11% X 6/12)		

(b) Current Ratio Dec. 31, 2014	=	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$
	=	$\frac{(\\$15,000 + \\$45,000 + \\$2,750 + \\$50,000 + \\$80,000)}{\\$70,000 + \\$16,000}$
	=	2.241
Current Ratio Dec. 31, 2013	=	$\frac{\\$20,000 + \\$40,000 + \\$85,000}{\\$65,000 + \\$15,000}$
	=	1.813
Accounts Receivable Turnover	=	$\frac{\text{Credit Sales}}{\text{Average Receivables}}$
	=	$\frac{\\$215,000}{(\\$95,000 + \\$40,000)/2}$
	=	3.19 times
		(or about 114 days)

PROBLEM 7-10 (Continued)

Current Ratio of 2.241 in 2014 is much higher than last year at 1.813. Accounts Receivable turnover of 3.19 times is significantly lower than last year's 4.75. The current ratio is considerably higher due to the increase in trade receivables (particularly the note receivable), and, for the same reason, the turnover is reduced. The existence of the one-year note from the major customer skews the turnover measurement as this receivable is no longer governed by normal credit terms. If the note receivable is excluded from the turnover ratio, the turnover is 5.06, indicating that the remainder of the receivables on open account are being collected with a slight improvement over the previous year.

PROBLEM 7-10 (Continued)

Part 2

(c)	Cash	50,904	
	Loss on Sale of Receivables	1,846	
	Notes Receivable		50,000
	Interest Receivable		2,750
	(\$50,000 X 11% X 6/12) = \$2,750		
	(\$50,000 + \$2,750) X 3.5% = \$1,846		
	\$52,750 - \$1,846 = \$50,904		

(d)	Cash	36,000	
	Due from Factor	2,400	
	Loss on Sale of Receivables	5,600	
	Accounts Receivable		40,000
	Recourse Liability		4,000

(e)	Current Ratio	=	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$
		=	$\frac{\$15,000 + \$50,904 + \$36,000 + \$5,000 + \$80,000 + \$2,400}{\$70,000 + \$16,000 + \$4,000}$
		=	$\frac{\$189,304}{\$90,000}$
		=	2.1
	Accounts Receivable Turnover	=	$\frac{\text{Credit Sales}}{\text{Average Receivables}}$
		=	$\frac{\$215,000}{(\$5,000 + \$40,000)/2}$
		=	9.56 times
			(or about 38 days)

PROBLEM 7-10 (Continued)

Logo has been able to speed up collection of receivables by transferring the note to the bank and selling accounts receivable to First Factors and has improved the current ratio from 1.813 to 2.1.

- (f) With a secured borrowing, the receivables stay on Logo's books and Logo records a Note Payable. This would reduce the current ratio and leave the receivable turnover ratio at approximately the same level as in Part I.**
- (g) The total effect on Prairie Bank's net income will be the difference between the maturity value of the note and the cash paid to Logo, $\$55,500 - \$50,904 = \$4,596$. However, because purchase of the note receivables was without recourse, Prairie Bank assumes the risk of collection and absorbs any losses.**
- (h) The total effect on Primary Factors' net income will be the difference between the cash it will collect (a total of $\$40,000$) and the cash it will pay to Logo (a total of $\$38,400$) = finance revenue of $\$1,600$, because purchase of receivables with recourse means that Logo guarantees payment of the receivables to Primary Factors if the accounts receivable debtors fail to pay. Therefore, Primary Factors will have no bad debts related to these receivables.**

PROBLEM 7-11

Ibran Corp.
INCOME STATEMENT EFFECT
For the year ended December 31, 2014

Expenses resulting from accounts receivable assigned (Schedule 1)	\$28,920
Loss resulting from accounts receivable sold (\$300,000 – \$275,000)	<u>25,000</u>
Total expenses	<u><u>\$53,920</u></u>

Schedule 1

**Calculation of Expense
for Accounts Receivable Assigned**

Assignment expense:			
Accounts receivable assigned		\$600,000	
		<u>X 90%</u>	
Advance by Provincial Finance		540,000	
		<u>X 3%</u>	\$16,200
Interest expense			<u>12,720</u>
Total expenses			<u><u>\$28,920</u></u>

Note: In transaction No. 3 there is no income effect as there is no interest expense incurred since the advance was received on December 31, 2014.

PROBLEM 7-12

(a)

**Cormier Corporation
Accounts Receivable Aging Schedule
May 31, 2014**

	Proportion of Total	Amount in Category	Probability of Non- Collection	Estimated Uncollectible Amount
Not yet due	.680	\$1,088,000	.010	\$10,880
Less than 30 days past due	.150	240,000	.035	8,400
30 to 60 days past due	.080	128,000	.050	6,400
61 to 120 days past due	.050	80,000	.090	7,200
121 to 180 days past due	.025	40,000	.300	12,000
Over 180 days past due	.015	24,000	.800	19,200
	<u>1.000</u>	<u>\$1,600,000</u>		<u>\$64,080</u>

(b)

**Cormier Corporation
Analysis of Allowance for Doubtful Accounts
May 31, 2014**

June 1, 2013 balance	\$ 43,300
Bad debt expense accrual (\$4,000,000 X .04)	<u>160,000</u>
Balance before writeoffs of bad accounts	203,300
Writeoffs of bad accounts	<u>145,000</u>
Balance before year end adjustment	58,300
Estimated uncollectible amount	<u>64,080</u>
Additional allowance needed	<u>\$ 5,780</u>

Bad Debt Expense.....	5,780	
Allowance for Doubtful Accounts.....		5,780

PROBLEM 7-12 (Continued)

**(c) 1. Steps to Improve
Accounts Receivable
Situation**

Establish more selective credit-granting policies, such as more restrictive credit requirements or more thorough credit investigations.

Establish a more rigorous collection policy either through external collection agencies or by its own personnel.

Charge interest on overdue accounts. Insist on cash on delivery (COD) or cash on order (COO) for new customers or poor credit risks.

Offer discounts to encourage early payment of balances. With high interest rates this is usually a popular strategy.

**2. Risks and Costs
Involved**

This policy could result in lost sales and increased costs of credit evaluation. The company may be all but forced to adhere to the prevailing credit-granting policies of the office equipment and supplies industry.

This policy may offend current customers and thus risk future sales. Increased collection costs could result from this policy.

This policy could result in lost sales and increased administrative costs.

This policy could potentially be expensive to the organization.

PROBLEM 7-13

(a)

Cash	53,400	
Due from Factor	3,000 *	
Loss on Sale of Receivables	10,600**	
 Recourse Liability		7,000
 Accounts Receivable		60,000
* (\$60,000 X 5%)		
** (\$60,000 X 6%) + Recourse Liability of \$7,000		

(b)

Accounts Receivable:

Balance December 31, 2013	\$ 90,000
Add credit sales during 2014	550,000
Less collections on account 2014	(500,000)
Less accounts receivable factored	(60,000)
Less writeoffs during 2014	(3,200)
Add receivable for post-dated cheque from cash	2,000
Balance December 31, 2014	<u>\$ 78,800</u>

Allowance for Doubtful Accounts:

Balance December 31, 2013	\$ 8,500
Less writeoffs during 2014	(3,200)
Add bad debt expense accrual (plug)	6,700
Balance December 31, 2014	<u>\$ 12,000</u>

PROBLEM 7-13 (Continued)

(c)

Current Assets

Cash		\$ 12,900*
Accounts receivable	\$78,800	
Allowance for doubtful accounts	<u>(12,000)</u>	66,800
Interest receivable		3,267**
Due from factor		3,000
Notes receivable		80,000
Inventory		80,000
Prepaid expenses		<u>100</u>
Total current assets		<u><u>\$ 246,067</u></u>

* (\$15,000 - \$2,000 - \$100)

**(\$80,000 X 7% X 7/12)

(d)

Current Ratio =

	<u>Current Assets</u>
	<u>Current Liabilities</u>
2014 =	<u>\$246,067</u>
	<u>\$86,000</u>
=	2.86
2013 =	<u>\$186,500*</u>
	<u>\$80,000</u>
=	2.33

* (\$20,000 + \$90,000 - \$8,500 + \$85,000)

(e)

Accounts Receivable Turnover =

	<u>Credit Sales</u>
	<u>Average Receivables</u>
2014 =	<u>\$550,000</u>
	<u>(\$81,500 + \$66,800)/2</u>
=	7.42 times
2013 =	3.8 times

PROBLEM 7-13 (Continued)

Alternatively, the credit sales could be increased by the June 1 \$80,000 sales to a major customer, and the outstanding Note Receivable should then be included in determining the average accounts receivable balance. This reduces the turnover in 2014 to 5.52 (\$630,000 ÷ \$114,150), still an improvement over the 2013 ratio.

(f) Both liquidity ratios show improvement from 2013 to 2014.

(g)

Current Ratio =

		Current Assets
		Current Liabilities
2014 =		\$246,067 + \$43,600*
		\$86,000 + \$33,000**
=		\$289,667
		\$119,000
=		2.43

* (\$60,000 – \$13,400 - \$3,000) Factored Receivable less decrease in Cash received less Due from Factor

** (\$40,000 - \$7,000) Additional Loan less Recourse Liability

Accounts Receivable Turnover =	Credit Sales
	Average Receivables
2014 =	\$550,000
	[\$81,500 + (\$66,800 + \$60,000)]/2
	= 5.28 times

As demonstrated by the above recalculated ratio, if \$40,000 of the receivables had been assigned instead of \$60,000 factored, the current ratio in 2014 would be 2.43 instead of 2.86 as calculated above in (d).

PROBLEM 7-13 (Continued)

The accounts receivable turnover ratio would have shown a dramatic deterioration from 7.42 under the factoring scenario to 5.28 times under the assignment. (If the \$80,000 Note Receivable were included in the 2014 ending receivables balance, this would increase the numerator by \$80,000 and the denominator by an additional \$40,000 and reduce the turnover still further to 4.37 times from 5.52.)

These significant differences explain why companies often tend to prefer the effects of factoring on key ratios rather than the effects of assigning receivables.

*PROBLEM 7-14

(a) May 10	Petty Cash	400.00	
	Cash.....		400.00
May 31	Office Expense (\$63+\$99.50+\$35).	197.50	
	Supplies.....	25.00	
	Delivery Expense	48.50	
	Advertising Expense	22.80	
	Miscellaneous Expense.....	18.75	
	Freight-in.....	37.70	
	Cash Over and Short	2.65	
	Cash (\$400.00 – \$47.10).....		352.90
May 31	Petty Cash	100.00	
	Cash.....		100.00

***PROBLEM 7-14 (Continued)**

(b)	Balance per bank:		\$6,812
	Add:		
	Cash on Hand	246	
	Deposit in Transit	<u>3,000</u>	<u>3,246</u>
			10,058
	Deduct: Outstanding cheques		<u>(550)</u>
			<u>\$9,508</u>
	Balance per books:		
	(\$9,300 + \$31,000 – \$31,685)		\$8,615
	Add: Note Receivable		930
	Deduct: Bank Service Charge		<u>(37)</u>
			<u>\$9,508</u>
	Cash	930	
	Notes Receivable		900
	Interest Income		30
	Office Expense-Bank Charges	37	
	Cash		37
(c)	\$9,508 + \$500 = \$10,008.		

***PROBLEM 7-15**

(a)

Balance per bank, June 30		\$4,150.00
Add: Deposits in transit		2,890.00
Deduct: Outstanding cheques		<u>(2,136.05)</u>
Corrected balance, June 30		<u>\$4,903.95</u>

Balance per books, June 30		\$3,969.85
Add: Error in recording deposit (\$90 – \$60)	\$ 30.00	
Error on cheque no. 747		
(\$582.00 – \$58.20)	523.80	
Note collection (\$900 + \$36)	<u>936.00</u>	1,489.80
Deduct: NSF cheque	453.20	
Error on cheque no. 742 (\$491 – \$419)	72.00	
Bank service charges (\$25 + \$5.50)	<u>30.50</u>	<u>(555.70)</u>
Corrected balance, June 30		<u>\$4,903.95</u>

(b) Cash	1,489.80	
Accounts Receivable***		30.00
Accounts Payable		523.80*
Notes Receivable		900.00
Interest Income		36.00
Accounts Receivable	453.20	
Accounts Payable	72.00**	
Office Expense	30.50	
Cash		555.70

***Assumes that the purchase of the equipment was recorded at its proper price. If a straight cash purchase, then Equipment should be credited instead of Accounts Payable.**

****If a straight cash purchase, then Equipment should be debited instead of Accounts Payable.**

***** Assumes the cheque is a payment on account and that the sale was recorded at its proper price. If a straight cash sale, then Sales should be credited instead of Accounts Receivable.**

***PROBLEM 7-16**

(a)

Balance per bank statement, November 30 **\$56,270.20**

Add:

Cash on hand, not deposited **1,920.40**
58,190.60

Deduct:

Outstanding cheques

#1224 **\$1,635.29**
#1230 **2,468.30**
#1232 **3,625.15**
#1233 **482.17** **8,210.91**

Correct cash balance **\$49,979.69**

Balance per books, November 30 **\$49,183.22***

Add:

Bond interest collected by bank **1,400.00**
50,583.22

Deduct:

Bank charges not recorded in books **\$ 31.40**
Customer's cheque returned NSF **572.13** **603.53**

Correct cash balance **\$49,979.69**

***Calculation of balance per books,
November 30**

Balance per books, October 31 **\$ 41,847.85**

Add receipts for November **173,528.91**

215,376.76

Deduct disbursements for November **166,193.54**

Balance per books, November 30 **\$ 49,183.22**

***PROBLEM 7-16 (Continued)**

(b)	November 30		
Cash		1,400.00	
Interest Income			1,400.00
	November 30		
Office Expense- Bank Charges		31.40	
Cash			31.40
	November 30		
Accounts Receivable		572.13	
Cash			572.13

***PROBLEM 7-17**

**Calculation of Cash Balance per Books
General Chequing Account**

Cash balance, June 1, 2014		\$30,200.80
Receipts for June:		
Deposit on 6/12	\$1,507.06	
Deposit on 6/23	1,458.55	
Deposit on 6/28	4,157.48	
Deposit in transit	<u>4,607.96</u>	<u>11,731.05</u>
Cash available		41,931.85
Deduct disbursements per cheque register		<u>10,708.35</u>
Cash balance June 30, 2014		<u>\$31,223.50</u>

**Quartz Industries Ltd.
Bank Reconciliation—General Chequing Account
June 30, 2014**

Balance per bank statement June 30, 2014		\$28,735.78
Add: Deposit in transit (June receipts not deposited by June 30)		<u>4,607.96</u>
		33,343.74
Deduct:		
Outstanding cheques		
#6139	\$960.57	
#6146	691.88	
#6149	386.84	
#6152	750.00	
#6153	<u>392.00</u>	<u>3,181.29</u>
Correct cash balance		<u>\$30,162.45</u>
 Balance per books, June 30, 2014		 \$31,223.50
Deduct: Bank service charges		11.05
NSF cheque		<u>1,050.00</u>
Correct cash balance		<u>\$30,162.45</u>

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

CA 7-1 HANLEY LIMITED

Overview

The company is planning to go public and must therefore meet the listing requirements of the Venture Exchange. These listing requirements include benchmarks which will be affected by the choice of method used to estimate bad debts. The choice of method is therefore material since it will affect net tangible assets, net income, and working capital. The choice may cause the company to miss the benchmarks.

The Venture Exchange benchmarks exist to ensure that only companies who are stable and financially sound may list and therefore, the exchange staff must ensure that the method chosen reflects reality.

IFRS would be a constraint given the fact that they are planning to go public.

Analysis and recommendations

- **Any of these methods would be acceptable.**
- **The % of receivables might not be the best choice as it is based on past statistics. Given that the sales team has been more aggressive, collectibility might be an issue. Sales have also grown significantly and therefore it may be more difficult to predict collectibility based on the past.**

CA 7-1 (Continued)

- **Both the aging and percentage of sales method might provide more exact information, since each account will have been looked at. The % of sales is a very rough estimate and given the change in sales and sale policy, it might be difficult to predict. Both these methods result in the benchmarks not being attained. (Aging causes the net tangible assets to be too low by \$7,000 and % sales causes the net income test and tangible asset test to be missed.)**

In conclusion, given the change in business, it would appear that the benchmarks are not met. Although judgement is needed, the most appropriate method for calculating bad debt would be the aging method. Other factors would have to be considered in making the decision as to whether this company may be listed, but it would appear that the financial tests have not been met.

CA7-2 TELUS

Overview

Since the shares of the company trade on both the TSX and NYSE, GAAP is a constraint. These statements are for 2011 which is the first year that the company was required to adopt IFRS. The statements include an analysis showing the impact of switching from pre-changeover GAAP to IFRS (see excerpt below). Pre-changeover GAAP as it relates to securitization transactions is very similar to ASPE, so use ASPE for the analysis.

Credit ratings are important to the company, since it will further affect its ability to access funds as well as the cost of capital. In addition, the securitization agreement is affected by the credit rating (must maintain a BBB rating). The bond rating analysts will look at liquidity and solvency in assessing this and therefore, debt levels will be key.

Under the terms of credit facilities, the company is limited as to how much debt they can hold so debt would also be a sensitive number for this reason.

Analysis and recommendations

Issue: how to record the transfer of receivables

As a sale	As financing
- This is a bona fide exchange with an arm's length party – the receivables have been isolated from Telus in a separate trust (considered to be an arm's length trust associated with a major bank) and Telus does not appear to have any control over them (control is surrendered).	- This a creative form of obtaining financing. In substance, this is like a borrowing. - Given the fact that they will still service the arrangement, have the risks and rewards of ownership passed?

CA7-2 (Continued)

- They have already received a large % of the funds - \$400 million – and therefore this is collectible. - Note that risks and rewards have substantially passed even though they are servicing the assets, since they are charging a fee for providing this service. - There does not appear to be any recourse – the trust would appear to have the right to pledge or exchange the assets. - Even if credit risk retained or recourse, may still account for this as a sale under ASPE/pre-changeover GAAP – would have to accrue a provision for the loss/expected loss. - This position is supported by pre-changeover GAAP (and ASPE). Other.	- It appears as though the company may still hold some of the credit risk. - This position is supported by IFRS. Other.

At a minimum, note disclosure is very important as this will affect how the analysts and investors view the cash position of the company.

IC 7-1 FRITZ'S FURNITURE

Overview

- Business down due to economic downturn.
- Cash crunch and therefore plans to go to bank – bank will assess creditworthiness and will lend based on value of inventory and receivables. The higher the inventory and receivables, the higher the loan.
- As bookkeeper, you will want to provide Franklyn with the impact of choices in the financial statements. Franklyn will want to put his best foot forward to the bank to maximize his chances of getting the loan.

ASPE is a constraint.

Analysis and recommendations

Issue: Recognition of revenues under new sales promotion

Recognize revenues when shipped	Recognize revenues/income later
- Possession and legal title pass at time of delivery – therefore, risks and rewards pass. - Measurable = selling price of the inventory. - May consider discounting selling price and recognizing part of selling price as income from financing. - Other.	- Since no cash down, no real risk to the customer. They do not have a vested interest in the merchandise. Is this a real sale? - Collectibility may be an issue since a credit check will be done a year before the customer actually starts to pay – higher risk of default. - Other.

IC 7-1 (Continued)

In conclusion, it would seem more prudent to not recognize a sale until the revenue is earned. As an alternative, the sale might be recognized using the instalment sales method such that the sale is recognized but only as an instalment sale – with profits being deferred. Discussion should be had with the bank to determine whether the instalment sale could be used as collateral for the loan.

Issue: Transfer of receivables

Present as a sale/disposition	Present as financing
- FI is an arm's length party and will take legal title to the receivables therefore, a bona fide sale. - FI has the right to pledge or sell the assets and there is no repurchase agreement. This supports the fact that control has been surrendered to FI. - NB. if the credit cards are sold, the company might have to pay down some existing debt, since the debt is currently capped based on a % of credit card receivables outstanding (or may not be eligible for new financing from the bank since it is capped at 70% of credit card receivables). - Other.	- FF will retain possession of the receivables as well as service them. Therefore, the assets are not isolated from FF and control has not been surrendered. - May have recourse and therefore still has risks of ownership (risks/rewards likely would not have not been transferred if recourse exists). - Other.

It would appear that this should be reported as a financing, i.e., as debt. The AR would be left on the books. The additional debt might affect the company's ability to obtain the financing from the bank. Note that this is an area of significant complexity and standard setters are currently looking to revise the standards.

IC 7-2 BOWEARTH

Overview

- Historically, the company has been profitable but this year it will break even; therefore, there may be pressure to boost earnings.
- Main users = bank – it will be focusing on liquidity of company (current ratio, cash from operations) in determining whether to allocate additional resources. Government and WTO may use the statements to assess whether duties are unreasonable. Focus would be on profitability. Auditors will be auditing the financial statements and will want to ensure there are no misstatements, due to the fact that the company is looking for additional financing and due to the WTO investigation.
- GAAP constraint since its shares trade on PSE. As a publicly accountable entity, IFRS would be used.
- Role – the controller. May want to present the company in its best light, since the increase in the line of credit will be dependent on whether the company looks like it is able to pay back the loan.

Analysis and recommendations

Issue: How to account for the anti-dumping fee

Recognize the liability/cost	Do not accrue the liability/cost
- The US government has levied the fee and noted that the company must continue to pay or not be able to sell in the US market. BL thus has a duty, or obligation, to pay that it cannot avoid. The event that obligates them is the sale of lumber in the US and the imposition of the fee. - A legal obligation exists to pay and therefore, the company has little or no discretion to avoid.	- The Canadian government is appealing this levy to a global tribunal. NAFTA would seem to preclude the imposition of such tariffs. As the appeal is going well, it might be argued that the payment is not probable/likely and therefore no liability exists. -

IC 7-2 (Continued)

- If recognized, how to treat the costs? Could treat as cost of doing business or defer the cost. - Treating as a cost of business implies that this is an ongoing ordinary expense. This might be difficult to justify if the government has indicated that they might cancel them next year. On the other hand, the fee is still in place and anything could happen – including no cancellation. This is more conservative. - Recognition of the cost would make the fee more visible and reduce Net Income. This might help BL's position with the WTO. - Deferral is only an option if the cost meets the definition of an asset. - It is risky and non-transparent not to accrue and include as part of the cost of doing business. Users of the financial statements would want this information. This is a material amount since the average NI has been \$1,000,000. This is 3 times this amount. - Other	- Note further that the Canadian Government feels that the fees will be eliminated or reduced significantly. There are also rumours that the fees will be cancelled altogether this year. - The accrual makes the company look much worse than it really is and may hurt the chances of getting the line of credit. In fact, the company does not even need the additional loan if the fee is cancelled. Other.

Even though accrual will make the company look worse, there is a potential for loss here and a liability exists – therefore accrue.

IC 7-2 (Continued)

Issue: Should the cash be presented as “restricted”?

Present as restricted on the balances sheet	Present with the rest of the company's cash
- Should show separately since the company has set this aside to settle the liability. - The company is only allowed to continue to sell in the US market as long as they set this aside. This would show good faith. - Other	- Setting it aside on the balance sheet is premature since there is a good chance that it will not have to be paid out. - This worsens the current ratio unnecessarily – bank will focus on this ratio. - Other

This money is not available for settling other liabilities and so should be segregated.

IC 7-2 (Continued)

Issue: How to account for the lawsuit

Do not accrue anything for either lawsuit	Accrue
- It is too early to tell what the outcome may be and BL feels that the case is not strong – this is true for both cases. - May prejudice the outcome of the trial if accrued. - May want to include a general note disclosure. - Other.	- Must accrue something if it is measurable and likely and/or meets the definition of a liability. While it is too early to tell about the lawsuit from the shareholder, the firing of the President may have been premature and may result in some sort of settlement – need to confirm with the lawyers to determine if there is an obligation. - Note that if the shareholder lawsuit is successfully defended, the President's lawsuit may have merit and vice versa. - The President's lawsuit is measurable - at least in part (lost bonus). - Other.

It is too early to assess the outcome – therefore do not accrue.

IC 7-2 (Continued)

Issue: How to account for licensing arrangement with LI

Recognize royalty liability	Do not recognize – disclose only
- BL has a duty to pay the royalty regardless of sales (represents an economic burden). - Since the company has signed the contract, there is little or no discretion to avoid (enforceable). - LI has been in business for many years and the product is in great demand - therefore will pay the licensing fee. - The minimum fee is measurable and probable at \$500,000. - Would provide useful info to users re cash flows. - Other.	- It is unclear as to whether any sales must be made before the minimum royalty is payable and therefore, no liability exists, i.e., if no sales are made, is the deal still valid? - The event occurs when the sales are made. - Other.

Note disclosure will suffice at this point since it is early in terms of the contract.

IC 7-3 Creative Choice Financial Corporation (CC)

Overview:

CC is planning to expand operations with an additional \$10 million investment which requires an upfront deposit of \$2 million. It is also operating in an economic environment of higher default rates and expected higher interest rates which increase the likelihood of higher future mortgage default rates. The company has an incentive to show strong liquidity in order to continue to receive funding from the larger bank and remain onside with its debt to equity covenant which is close to the maximum allowable amount. Funding is needed for CC to continue operating as a mortgage originator.

The bank providing the funding holds as collateral against its loans, the remaining mortgage receivables (not pooled and sold to investors). It will be analyzing CC's financial results and any assumptions. The investors holding the mortgage backed securities are also important users of the statements. They will be assessing CC's ability to subsidize any customer defaults.

As controller, you want to make sure that the financial statements are transparent but at the same time ensure that the users understand that you have a good and viable business model. CC is a public company and must follow IFRS for public reporting.

Analysis and recommendations:

Record as on-balance sheet financing/no sale	Record as off-balance sheet financing/sale
- The risk and rewards of the mortgage receivables have not been transferred to third party investors. - CC's rights to future cash flows from the asset have not expired. CC will receive annual payments for servicing/collecting the mortgage receivables of \$25,000. - It can be argued that CC has continuing involvement as it is responsible for servicing and managing the receivables. - The pool of receivables have been sold with 'recourse' meaning individual investors purchasing the securities do not absorb the full risk of collection.	- CC no longer has control over the rights to the cash flow from the receivables. - CC has surrendered control of the receivables as they have been pooled and sold in the capital market to investors with no right of repurchase or rights to further pledge the receivables as collateral. - A financial components approach can be used such that the servicing asset of \$25,000 (future annual fees) may remain on the balance sheet while the remainder of the receivables are derecognized.

IC 7-3 (Continued)

- The impact of this is that it would increase liabilities and make the company appear to be more highly leveraged and risky. CC may breach its debt to equity ratio. - Other.	- The continuing involvement by CC can be estimated and recorded as a liability of 2% of the FV of receivables securitized (recourse amount). - Other.

The company may prefer to treat the securitization as an off-balance sheet transaction in order to prevent the recognition of additional liabilities. However, the risk and rewards have not been transferred. Even without a breach of covenants, CC may consider providing enhanced disclosure to investors.

Issue: Valuation of the mortgage receivables.

Reduce the value of the mortgage receivables	No impairment
- Customer defaults increased by 1% in the previous quarter. A further 1% increase is expected over the next quarter. - A default by mortgage holders means investors do not get paid, CC becomes liable for more defaulted mortgage payments and there is no leftover cash flow for CC's residual interest. - Additionally, the pooled mortgage receivables have adjustable rates. An increase in the interest rate by 1% as seen in the last quarter can further increase the risk of default of future mortgage payments. - Other.	- The increase in interest rates is triggered after five years into the loan. The most recent quarter's increase in interest rates by 1% may be a temporary increase (especially with the expected increase in the default rate). - Other.

In conclusion, given the expected increase in mortgage default rates CC should write-down the mortgage receivables

IC 7-3 (Continued)

Issue: Measurement of the zero-interest bearing note.

CC must record the note at its present value of \$133,500. There is an implied interest rate which can be calculated as the future amount of the note \$150,000 is known. The difference between the present value and future value should be amortized as interest over the 2 year life of the note using the effective interest method of amortization.

The implied interest rate is 6% (PV factor, n of 2 is 0.89 = $\$133,500 / \$150,000$).
The CV of the note should be recorded at \$133,500.

Upon inception, CC should record the PV of the note.

Note Receivable.....	133,500	
Cash		133,500

At the end of Year 1 CC should record the interest on the note using the effective interest method:

Note Receivable.....	8,010	
Interest Income ($\$133,500 \times 6\%$)		8,010

At the end of Year 2:

Note Receivable.....	8,490	
Interest Income ($\$141,510 \times 6\%$)		8,490

Upon repayment of the note receivable, CC will record the following:

Cash	150,000	
Note Receivable.....		150,000

SOLUTIONS TO WRITING ASSIGNMENTS

WA 7-1

A “Financial Asset” is defined by *CICA Handbook* Section 3856 as “any asset that is:

- (i) cash;**
- (ii) a contractual right to receive cash or another financial asset from another party;**
- (iii) a contractual right to exchange financial instruments with another party under conditions that are potentially favourable; or**
- (iv) an equity instrument of another entity.”**

IAS 32 has a similar definition but also includes certain contracts that will or may be settled in the entity’s own equity instruments.

All of the items listed are financial assets with the exception of items (4) and (7). The “Note receivable, receivable in grams of a precious metal” is not a financial asset as this asset can only be settled with a non-financial asset. The income taxes receivable is also not a financial asset since it is not a contractual right to cash. The rights to cash in this case are established by legislation, not a contract.

WA 7-2

(a) IAS 39 paragraph 58 states that loans and receivables are tested at each reporting period to determine if there is any objective evidence that an individual asset or group of receivables is impaired.

(b) IAS 39 paragraph 59 details examples of objective evidence of impairment including the following:

- **significant financial difficulty of the obligor;**
- **default in payments;**
- **the entity grants to the customer, concessions that would not otherwise be considered, due to the customer's financial difficulties;**
- **it looks probable that the customer will seek bankruptcy or creditor protection;**
- **although not specific to an individual account, overall, for a group of loans or receivables, there is a:**
 - i. **marked increase in payment defaults, or credit cards that have reached their credit limit and are paying the minimum balances;**
 - ii. **an increase in the unemployment rate in a geographical area;**
 - iii. **a decrease in property prices for mortgages in a geographical area;**
 - iv. **a decrease in oil prices for loan assets to oil producers**
 - v. **or, generally, adverse conditions in an industry affecting the customer's ability to pay.**

(c) Evidence, that by itself, does not indicate impairment:

- **Disappearance of an active market;**
- **Downgrade in a customer's credit rating;**

(d) First, the entity looks at significant individual loans and receivables for objective evidence of impairment. (If individual balances are immaterial, then they can be treated as a group.) Then the individual asset can be included in a group with similar credit risk and can collectively be assessed for objective evidence of impairment.

WA 7-3

The controller of Arkin Corp. cannot justify the manner in which the company has accounted for the transaction in terms of sound financial accounting principles.

The sale of shares appears to have been made March 1 and the company's year-end is March 31, 2014. To account for this note receivable, the company must address the following issues:

Is the company a party to the contract at March 31? Yes, the deal appears to have been completed at March 1 and the company has a signed note receivable as proof.

- **The loan receivable must be measured at its fair value initially – March 1. In order to measure the loan receivable at fair value, the company must determine the present value of the expected future cash flows using a market interest rate that appropriates the rate for loans with a similar level of credit risk. This issue is discussed in further detail below.**

At each reporting date, March 31, the company will measure the loan receivable at amortized cost plus accrued interest; and

- **At each reporting period, the company will have to test whether or not the loan receivable has been impaired and if so, an impairment loss is recognized.**

At March 1, the fair value of the note receivable must be determined. The note is repayable over 10 years with an annual payment of \$400,000 on March 1. In looking at the market for similar credit risk investments, assume that an appropriate rate of interest would be 8%.

Using the interest rate of 8%, the present value of the annuity of \$400,000 for ten periods is equal to \$2,684,032 ($\$400,000 \times 6.71008$). In this case, a loss of \$315,968 must be recognized. There is a question about how the transaction fees should be reported. Are the transaction fees a cost of the disposal which

WA 7-3 (Continued)

increases the loss on disposal? Or are the transaction fees related to preparing the note receivable? In this case let's assume that the full amount of the transaction fees was allocated to the note receivable. In addition, under IFRS, the transaction fees (commission) of \$20,000 would also be recorded as part of the receivable as illustrated by the following journal entry to be recorded March 1:

Notes Receivable	2,704,032	
Loss on Investments	315,968	
FV-NI Investments		3,000,000
Cash		20,000

On March 31, 2014, the company must record interest income for the period of one month. Under IFRS, the effective interest rate method must be used and the effective interest rate will have to be re-calculated given that the present value is now \$2,704,032.

Based on this present value, and 10 annual payments of \$400,000 each, the effective interest rate is 7.83%.

Using this effective interest rate, the accrued interest for one month is:

$$2,704,032 \times 7.83\% \times 1/12 = 17,643$$

Theoretically, the loan receivable should be tested for impairment at March 31. However, since the loan is only one month old, it is assumed that there is no impairment of value.

WA 7-3 (Continued)

Calculation of revised net income:

Net income before net gain was recorded	(5,200,000 – 686,000)	4,514,000
Loss on disposal – assume a capital loss and no immediate tax benefit		(315,968)
Accrued interest income net of tax	17,643 (1- .3)	<u>12,351</u>
Revised net income		<u><u>4,210,383</u></u>

Under ASPE, there are two differences as follows:

- Transaction fees may be expensed and are not required to be capitalized
- The company may use a straight-line amortization method for the interest rather than the effective interest rate.

Using the interest rate of 8%, the present value of the annuity of \$400,000 for ten periods is equal to \$2,684,032 (\$400,000 X 6.71008). In this case, a loss of \$315,968 must be recognized. The journal entry to record this on March 1 is:

Notes Receivable	2,684,032	
Commission Expense	20,000	
Loss on Investments	315,968	
FV-NI Investments		3,000,000
Cash		20,000

WA 7-3 (Continued)

Using the straight-line method for the amortization of the interest, the total interest income reported over the total ten years will be: $10 \times \$400,000 - 2,684,032 = \$1,315,968$. The annual interest income to be recorded will be: $\$1,315,968/10 = \$131,597$. And the one month accrued interest income will be: $\$131,597 \times 1/12 = \$10,966$.

Calculation of revised net income:

Net income before net gain was recorded	
(5,200,000 – 686,000)	4,514,000
Loss on disposal – assume a capital loss	
and no immediate tax benefit	(315,968)
Commissions expensed net of tax	
(20,000 X (1-30%))	(14,000)
Accrued interest income net of tax at 30%:	
10,966 X (1-30%)	<u>7,676</u>
Revised net income	<u><u>4,191,708</u></u>

This amount is less than the net income reported in prior years of \$4.8 million.

WA 7-4

- (a) No, the controller should not be concerned with Rudolph Corp.'s growth rate in estimating the allowance. The ethical accountant's proper task is to make a reasonable estimate of the necessary allowance for doubtful accounts. In making the estimate, the controller should consider the previous year's write-offs and also anticipate economic factors, which might affect the company's industry and influence Rudolph's current year's write-off.**
- (b) The controller's interest in disclosing financial information completely and fairly conflicts with the president's economic interest in manipulating income to avoid undesirable demands from the parent company. Such a conflict of interests is an ethical dilemma. The controller must recognize the dilemma, identify the alternatives, and decide what to do.**

WA 7-5

David Pullman created the Bowie Bond, which is also referred to as Pullman Bonds and they were issued in 1997. They are music-backed bonds. This is an example of securitization of an artist's intellectual property. Investors of Bowie Bonds benefit from a portion of future earnings of musician David Bowie. This is an example of "asset-backed securities". Basically, "investors purchase a claim on future cash flows."

This is similar to securities backed by credit card debt where investors have claim to future payments on the credit card debt. This is also similar to accounts receivable securitization where a company sells shares in a pool of assets (i.e., accounts receivable). The result is asset-backed securities. Companies are able to enter into these types of transactions as there is a payment stream, and the investor would purchase a claim on this future payment stream.

Sources: "Bankers Hope For A Reprise Of 'Bowie Bonds'", Karen Richardson, The Wall Street Journal August 23, 2005 and "The Rocky (and Rolling) Road to Securitization", Lynna Goch Best's Review Magazine, October

WA 7-6

The intention of ASPE is to reduce the complexity of reporting for receivables and cash equivalents. This is evident in the differences between IFRS and ASPE. Under both ASPE and IFRS, receivables are initially measured at fair value. One difference relates to how any premium or discount (arising on initial recognition of a long term receivable) will be amortized over the expected life of the receivable. ASPE reduces the complexity in this area by simply stating that the amortization will be over the life of the receivable and therefore, the straight line method (a simpler method) or the effective interest rate method may be used. Under IFRS, the more complex method, the effective interest rate method, must be used. Similarly, under ASPE, equity investments may never be part of cash equivalents. In contrast, IFRS allows certain types of preferred shares that are acquired within 3 months of mandatory redemption to be included in cash equivalents.

Another major difference between ASPE and IFRS relates to impairment values for receivables. In the case of ASPE, on impairment, the receivable can be written down to the highest of three amounts, including:

- 1. Future cash flows generated by the receivable discounted at a current market rate;**
- 2. Expected proceeds on sale of the receivables; and**
- 3. Expected proceeds on sale of the collateral provided as security for the receivable.**

These three alternatives are less complex than required under IFRS, which requires the fair value be calculated by discounting future cash flows at the original effective rate used to recognize the receivable. Under ASPE, since the original effective rate is not required (as noted above), the preparer is not required to maintain this information.

WA 7-6 (Continued)

The last difference relates to the extent of note disclosure required. ASPE has been designed to reduce note disclosure substantially given that the main users are creditors with access to management. Basic disclosure for receivables would include discussion of the exposure to credit risk, changes to this risk over the period and any concentration of risk due to the customer portfolio. IFRS requires more detailed quantitative and qualitative disclosure of the credit risk, reconciliation of the allowance for doubtful accounts, and more disclosure on fair values. Under IFRS, with primary users being investors and creditors with little access to management, extensive disclosure is needed.

RESEARCH AND FINANCIAL ANALYSIS

RA 7-1 MAPLE LEAF FOODS INC.

- (a) As per note 4, the company has entered into securitization programs by selling a portion of its accounts receivable to an entity owned by a financial institution. The company retains servicing responsibilities and limited recourse for uncollected receivables. At the 2011 and 2010 year ends, the amount securitized was \$254.3 million and \$265.2 million, respectively.
- (b) Based on the results below, it appears that Maple Leaf accounts receivable turnover is not consistent over 2011 and 2010. In fact, 2010 appears very low.

As reported (in thousands of dollars)	2011	2010	Change
(1) Accounts receivable ending	\$ 133,504	\$108,739	+22.8%
(2) Sales	4,893,624	4,968,119	-1.5%
Days in receivables (1)/(2) X 365	10.0 days	8.0 days	

- (c) As shown above, sales decreased by 1.5 % between 2010 and 2011, while accounts receivables increased by almost 23%. Since one generally expects that lower sales will result in lower receivables, the 2011 results are very unusual but it could be that collections have slowed significantly, resulting in growth (or increase) in receivables.

(d)

Revised to include securitized receivables	2011	2010	Change
Accounts receivable ending as			
(1) reported	\$ 133,504	\$108,739	+22.8%
(2) Amount securitized as per note 5	254,300	265,200	
(3) Revised Accounts receivable ending*	387,804	373,939	+3.7%
(4) Sales	4,893,624	4,968,119	-1.5%
Average Age of receivables (3)/(4) X 365	28.9	27.5	

* figure is the total of (1) and (2)

RA 7-1 (Continued)

When securitized receivables are added back in, we see that total receivables have still increased at a higher rate than sales, but the difference is not nearly as significant. The days needed for collection is longer when the securitized amounts are included, and this is likely closer to actual. This highlights the fact that securitization significantly affects traditional financial statement relationships and ratios. Care must be taken to understand what is or is not included when calculating trends or ratios. It may be argued that since the company retains servicing responsibilities on the securitized receivables, the revised analysis with such amounts added back is the more appropriate of the two presented.

RA 7-2 CANADIAN TIRE CORPORATION LIMITED

- (a) Canadian Tire Corporation defines cash and cash equivalents as “cash plus highly liquid and rated certificates of deposit or commercial paper with an original term to maturity of three months or less”. Included in cash and cash equivalents is “restricted cash and cash equivalents held within Glacier Credit Card Trust (“GCCT”) ... [that] can only be used for the purposes of paying out note holders and additional funding costs”. This is described in Note 3 (Significant Accounting Policies). Note 9 then indicates that the amount is separated as follows:

	2011 \$	2010 \$
Cash	79.6	15.5
Cash equivalents	233.4	538.2
Restricted cash & cash equivalents	12.8	15.2
Bank indebtedness	(124.8)	(118.0)
Total	201.0	450.9

(Note: CTC's 2010 fiscal year actually ended on January 1, 2011)

- (b) Based on the accounting policy note, the criteria currently in use is that the investments must be due within three months and have insignificant risk. These are characteristics corresponding to the money market instruments that Canadian Tire holds.
- (c) The company has trade and other receivables, loans receivable and long term receivables and other assets. Notes 3 and 6.3.2 explain that the loans mortgage receivable balances include credit card, personal, mortgage and personal line of credit loans. The trade and other receivables are initially recorded at fair value, and are subsequently measured at amortized cost using the effective interest rate method. They are net of an allowance for impairment. To determine the allowance, the company considers indicators that the trade receivable is impaired such as: “significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments.” Note 11 summarizes trade and other receivables, while note 12 outlines the current loans, comprising of credit cards, line of credit loans, and personal loans to a total for financial services loans of \$4,038.9 million (prior to inclusion of dealer and other loans, and netting off of the long-term portion). Note 14 shows the long term loans receivable to be \$594.7 million and long term mortgages to be \$63.9 million.

RA 7-2 (Continued)

Note 6.3.3 provides the details of the net credit losses and details of allowances on all the receivables. The balance in the allowance at the end of the year was \$130.9 million. During the year, impairment for credit losses, recoveries and write-offs totalled \$307.0 million, \$50.1 million and \$351.6 million, respectively.

(d) As provided in Note 6.3.3, when there has been deterioration in credit quality of a loan, it is considered impaired. Specifically,

- **Credit card loans that are 180 days past due are considered impaired and written off**
- **Personal loans are impaired when more than 90 days past due and are written off after one year**

The impairment value of the loans is estimated to be the expected future cash flows discounted at the original effective interest rate inherent in the loans (i.e. the existing effective interest rate, not the current market rate). According to note 10.1, “default rates, loss rates and the expected timing of future recoveries are regularly benchmarked against actual outcomes to ensure that they remain appropriate.”

(e) According to the *CICA Handbook* Sec. 3856.A66, “Credit risk is the risk that one party to a financial instrument will cause a financial loss by failing to discharge an obligation.” In the case of Canadian Tire, as reported under note 6 to the financial statements titled “Financial Risk Management”, and more specifically note 6.3 the Corporation’s exposure to credit risks is described as being limited due in part to the fact that the trade and other receivables are primarily from “Dealers and franchisees spread across Canada, a large and geographically dispersed group who, individually, generally comprise less than one per cent of the total balance outstanding”. The company has a similar diversification of risk with respect to its credit card, personal and retail bank customer loans since these loans are from a large and geographically dispersed group. The company also has credit risk related to derivative financial instruments, but since this is dispersed across different “highly rated financial institutions”, credit risk is low (see Note 11.3). The maximum loss, should all parties default at one time would be \$17.8 billion. Overall, the exposure to credit risk seems to be low given the diversification and number of credit related parties.

RA 7-2 (Continued)

- (f) The securitization that Canadian Tire is involved in includes a continuing relationship with the accounts. Section 8.3 of the Management's Discussion and Analysis (MD&A) explains the format of the securitization of the loans. Canadian Tire uses securitization in the form of commercial paper, senior notes and subordinated notes through the GCCT special purpose entity. \$200 million of credit card receivables were securitized as part of the GCCT securitization program in 2011. As the company indicates in its MD&A, prior to adopting IFRS securitization transactions were treated as a sale of the related receivables with a de-recognition of the related assets. However, under IFRS, the securitization transactions with GCCT no longer meet the de-recognition criteria and GCCT has been consolidated as part of the Canadian Tire financial statements (see p. 70 of the 2011 annual report).**

RA 7-3 LOBLAW COMPANIES LIMITED AND EMPIRE COMPANY LIMITED

- (a) Loblaw is primarily a retailer of food, general merchandise, drugs and financial products. It operates 584 corporate owned stores and 462 franchisee owned stores. Empire operates in two businesses – food retailing and real estate. Food retailing is the distribution of food products throughout Canada under the banners of Sobeys, IGA, and Thrifty Foods to name a few. The company has owned and franchised outlets. The real estate division is involved in the development of commercial properties through the Crombie REIT held for food-anchored retail plazas, and development of residential housing lots for sale via Genstar.
- (b) Empire has cash and cash equivalents totaling \$616.9 million at May 7, 2011. As per Note 1, the company includes cash, treasury bills and guaranteed investments with maturity dates at time of acquisition of 90 days or less. No further details are provided as to the composition of the cash and cash equivalents. There is no restricted cash.

Loblaw's has cash and cash equivalents of \$966 million which includes highly liquid marketable investments with 90 days or less maturity. In Note 6, Loblaw provides additional details as to the composition of the cash and cash equivalents as follows (in millions \$):

- Cash \$232
- Government treasury bills \$227
- Corporate commercial paper, term deposits and bankers' acceptances \$452.
- Other \$55

Loblaw also has no restricted cash.

- (c) Loblaw has Accounts Receivable totaling \$2,568 million at December 31, 2011. As per Notes 7 and 8, these receivables are made up of credit card receivables (\$2.1 billion from the PC credit card) and other receivables (due from independent franchisees, associated stores, independent accounts for goods sold and amounts owed from vendors) for \$467 million. The credit cards have been securitized through PC Bank, but the company retains substantially all of the risks and rewards relating to these receivables so it retains the credit card receivables in assets and accounts for them as secured financing transactions.

RA 7-3 (Continued)

Empire has (trade) receivables of \$346.6 million arising on the sale of goods to franchisees, independent accounts and allowances from vendors. It also has current loans and other receivables of \$81.7 million, and long term loans and other receivables of \$68.8 million at May 7, 2011. As per Note 6, the company has total loans and mortgages receivable of \$41.3 million, and other receivables of \$109.2 million before the allocation between current and non-current. The loans and mortgages receivable are long-term financing provided to retail associates and are repayable in terms of up to ten years, with variable interest rates and are secured by inventory, fixtures and equipment. These loans are reported at approximate fair value.

The main similarity in receivables between the two companies is the receivables arising from sales to associates and franchisees.

- (d) As per Note 1 for Empire, the loans and receivables are recorded at amortized cost and tested for impairment where losses are immediately reported to net income. As further detailed in Note 22, the company outlines its credit risk and how the allowance is determined. Credit risk arises when a customer fails to meet its contractual obligations. The company tries to mitigate this credit risk through a credit approval process, credit limits and continual monitoring of accounts. Also, some of the loans are secured, and the security is monitored. Finally, the company has a large number of customers and a geographic dispersion to lessen the impact of losses. To determine the allowance, the company examines the due dates and the amounts over a 30 day collection period are considered past due. At May 7, 2011, the company had 85.4% (307.1/359.7) of receivables that were current, 4.9% (17.8/359.7) over 30 days but less than 90 days due, and 9.7% (34.8/359.7) that were over 90 days due. To determine the allowance for doubtful accounts the company reviews past due accounts from independent accounts, and recoverability net of security assigned from franchise or affiliate balances. During the 2011 year the company recorded \$0.3 million for provision for losses, \$2.9 million for recoveries, and \$4.4 million in write-offs. The bad debts expense was \$11.6 million for the year. The allowance for doubtful accounts at May 7, 2011 was \$13.1 million, representing 3.6% (13.1/359.7) of all trade receivables outstanding at the year end. This appears to be adequate, given that this is about 37.6% of all accounts past due by more than 90 days.

RA 7-3 (Continued)

For Loblaw, Note 8 details the allowance for doubtful accounts. There is an aging of the credit card receivables provided that indicates 97.9% of these receivables are current (< 30 days) and 1.4% are in the > 60 days category. The company does state in Note 8 that, of its credit receivables that are past due, \$24 million are not classified as impaired as they are less than 90 days past due and the past due status was expected to be “remedied”. Credit card balances that are more than 180 days past due, or where the likelihood of collection is remote, are written off.

The company notes for the other receivables that the amount past due but not impaired is \$96 million, of which \$59 million is more than 60 days past due (Note 7).

As per Notes 7 and 8, at December 31, 2011, the company reported an allowance for doubtful accounts related to the credit cards of \$37 million and \$112 million for the other receivables. This represents 24.0% (112/467) of other trade receivables outstanding. This is substantially higher than Empire’s allowance. During the 2011, for its credit card receivables the company recorded \$87 million in its provision for losses, \$14 million for recoveries, and \$98 million in write-offs (for its other receivables, the net addition to the allowance for uncollectible amounts was \$7 million, per Note 7).

In Note 26, Loblaw outlines how it manages credit risk due to default on the PC Bank credit cards receivables, and the other receivables from its independent franchisees, associated stores and independent accounts. The company manages this risk by using credit scoring techniques, monitoring the credit card balances and implementing technology to speed up collection. Because the company has many customers over a large geographic area, credit risk is minimized. Balances with franchisees and associates are monitored, and settled on a regular basis, pursuant to agreements.

- (e) Loblaw has securitized its credit card receivables in the amount of \$1,505 million at the end of fiscal 2011. Loblaw sells these to Eagle Credit Card Trust and independent trusts and retains the risks and rewards of ownership as well as control over the transferred assets (this could include for example, servicing responsibilities, some administrative responsibilities and rights to some of the cash flows after the investors’ obligations are met).**

RA 7-3 (Continued)

- (f) In order to calculate the turnover ratios, we need the credit sales and the related accounts receivable. Only the receivable from the franchisees and associates could be used for the turnover ratio. (The credit card sales arise outside of Loblaw where ever the customer uses their PC Bank credit card.) However, we do not know the amount of credit sales made to franchisees and associates for either company. In both cases, cash sales are made to many customers who buy goods in the corporate owned stores and the sales number is a combination of credit and cash sales. Without the breakdown, a meaningful turnover ratio cannot be calculated.**

RA 7-4 RESEARCH CASE

As per paragraphs 3.1 in the Discussion Paper, the IASB has proposed that cash be shown separately on the statement of financial position, and that “cash equivalents” should be presented and classified as all other short-term investments in either operating, investing or financing assets. Historically, cash equivalents has been included with cash on the balance sheet presentation since entities often use these short term investments to manage their cash, and entities treat these investments similar to cash. Therefore, as long as the investment could be readily converted into cash, it didn’t matter whether or not the cash was actually sitting in the bank or available from short term investments.

The IASB decided that segregating cash from cash equivalents would better convey liquidity and financial flexibility of the company. Cash is normally used to repay investors and creditors and pay bills and payroll, not the cash equivalents. Short term investments, although readily convertible into cash, still do not have the same characteristics as cash on hand and in the bank. There is always some level of risk in the conversion of a short term investment into cash, even though it might be minimal in most cases. And with sudden changes in the credit risk environment, (as we saw with the credit crisis), what was thought to have little risk, may indeed have a lot more.

By separating out cash from cash equivalents, the cash equivalents can now be properly segregated into the various categories of operating, investing or financing assets. This separation should allow users to more accurately assess the company’s liquidity and amount, timing and riskiness of future cash flows.

My opinion (and this may differ from students) is that this would be better disclosure. It is important to know the breakdown of cash and cash equivalents not only for liquidity but also to understand which components earn interest income and which components might not (cash for example). Companies do not always provide this breakdown. Also, this separation may give information on the minimum balance of cash that companies like to have, which can be used to further assess if the company is properly investing excess cash.

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CHAPTER 8

INVENTORY

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercise	Exercise	Problem	Writing Assignment
Definitions and inventory categories	1			3, 5
Decisions required for inventory	2,19	9		1
Physical goods included	3, 5	4, 5, 6, 7	1, 3, 7	1
Components of inventory cost	3, 4, 6, 8, 18	3, 4, 7, 12, 13	1, 2, 3, 5, 7	1
Perpetual vs. Periodic systems	3	1, 2, 3, 14, 15	9, 14	
GAAP cost formula options	6, 9, 10	14, 15, 16, 17, 18, 19	1,6,8,12,14	2
LC&NRV	11, 12	11, 13, 17, 16, 18	4, 9, 11	8
Purchase commitments	13	20	11	3
Inventory at other than LC&NRV	14, 21		4	5, 6
Inventory errors	7	6, 8, 9, 10, 11	4, 7	
Gross profit method	15	21, 22	10	
Disclosures			11	
Analysis	16	11, 23, 24	3, 7, 8	

ASSIGNMENT CLASSIFICATION TABLE (Continued)

Topics	Brief Exercise	Exercise	Problem	Writing Assignment
ASPE GAAP vs. IFRS	4, 11, 13,14	4, 7, 11, 20, 26	2, 11	3, 5, 7
Retail method	17	25	13	6
Primary GAAP sources	20	27		4

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E8-1	Periodic versus perpetual entries.	Moderate	15-25
E8-2	Determining merchandise amounts.	Simple	10-20
E8-3	Purchases recorded net, periodic system.	Moderate	15-20
E8-3	Inventoriable costs.	Simple	10-15
E8-4	Inventoriable costs.	Simple	10-15
E8-5	Inventoriable costs - perpetual	Moderate	15-20
E8-6	Inventoriable costs-error adjustment	Moderate	15-20
E8-7	Inventoriable costs	Moderate	15-20
E8-8	Inventory errors.	Simple	10-15
E8-9	Inventory errors.	Moderate	15-20
E8-10	Inventory errors	Complex	30-35
E8-11	Lower of cost and NRV—error effect and analysis.	Simple	15-20
E8-12	Relative sales value method.	Simple	15-20
E8-13	Cost allocation and LC&NRV.	Moderate	20-25
E8-14	Calculate FIFO, moving average cost—perpetual and periodic.	Moderate	15-20
E8-15	SI, FIFO and weighted average.	Moderate	15-20
E8-16	Calculate FIFO, weighted average cost—periodic	Moderate	20-25
E8-17	Calculate FIFO, moving average cost—perpetual.	Complex	40-55
E8-18	Lower of cost and NRV—journal entries.	Simple	10-15
E8-19	Lower of cost and NRV—valuation account.	Moderate	20-25
E8-20	Purchase commitments.	Simple	15-20

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
E8-21	Gross profit method.	Simple	10-15
E8-22	Gross profit method.	Moderate	15-20
E8-23	Inventory trend analysis and ratios.	Moderate	20-25
E8-24	Trend analysis and ratios.	Complex	20-25
*E8-25	Retail inventory method.	Simple	20-25
E8-26	Biological inventory assets	Simple	20-25
E8-27	Primary sources of GAAP	Simple	10-15
P8-1	Various inventory issues.	Moderate	25-30
P8-2	Vendor rebates.	Moderate	25-30
P8-3	Inventory adjustments.	Moderate	30-40
P8-4	Income statement restatement and analysis for LC&NRV.	Moderate	30-40
P8-5	Purchases recorded gross and net.	Simple	20-25
P8-6	FIFO Weighted average – periodic.	Moderate	20-25
P8-7	Inventory and other errors – effect on ratios.	Complex	30-40
P8-8	Calculate FIFO and weighted average cost income and ratios.	Moderate	30-40
P8-9	Entries for lower of cost and NRV—direct and allowance.	Moderate	20-25
P8-10	Gross profit method.	Moderate	30-35
P8-11	Statement and note disclosure, LC&NRV, and purchase commitment.	Complex	40-50
P8-12	Lower of cost and NR.	Moderate	30-35
*P8-13	Retail inventory method.	Moderate	20-30
P8-14	Calculate FIFO, moving average cost—perpetual.	Moderate	20-30

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 8-1

Raw Materials Inventory	Work in Process Inventory	Finished Goods Inventory	Other
(a)Engine	(e)Direct Labour: Wages paid to assembly line employees	(h)Toyota Corolla ready to be shipped to the dealer	(d)Standby equipment (fixed asset)
(b)Nuts and Bolts (or materials and supplies inventory)	(f)Manufacturing Overhead: Factory Rent		(i)Manufacturing plant (fixed asset)
	(g)Manufacturing Overhead: Wages paid to supervisors		(c) Spare parts

The response would remain unchanged under ASPE.

BRIEF EXERCISE 8-2

Users of the financial statements will be interested in knowing the total investment made in inventories, the various types of inventory, how the inventory costs are calculated, whether the inventories have been pledged as collateral on any loans, and whether the inventories have been written down due to a decline in value.

BRIEF EXERCISE 8-3

(a) Perpetual Inventory System

Inventory (200 X \$100)	20,000	
Accounts Payable		20,000
Accounts Payable (6 X \$100)	600	
Inventory		600
Accounts Receivable (150 X \$200)	30,000	
Sales Revenue		30,000
Cost of Goods Sold (150 X \$100)	15,000	
Inventory		15,000

(b) Periodic Inventory System

Purchases (200 X \$100)	20,000	
Accounts Payable		20,000
Accounts Payable (6 X \$100)	600	
Purchase Returns and Allowances		600
Accounts Receivable (150 X \$200)	30,000	
Sales		30,000

BRIEF EXERCISE 8-3 (Continued)

(c)

Balance of 94 units is calculated as follows:

	<u>Unit</u>	<u>Total</u> <u>@\$100</u>	
Beg. Inventory	50	\$ 5,000	
Purchases	200	20,000	
Less: Purchase Returns	(6)	(600)	
Cost of Goods Sold	<u>(150)</u>	<u>(15,000)</u>	
Ending balance	<u>94</u>	<u>\$ 9,400</u>	
Inventory*		4,400	
Cost of Goods Sold		15,000	
Purchase Returns and Allowances		600	
Purchases			20,000
*\$9,400 – 5,000			

BRIEF EXERCISE 8-4

(a) Invoice paid in full on July 15

(1)	July 11	Purchases	4,000	
		Accounts Payable.....		4,000
	July 15	Accounts Payable.....	4,000	
		Purchase Discounts		120
		(\$4,000 X .03)		
		Cash		3,880
(2)	July 11	Purchases	3,880	
		Accounts Payable.....		3,880
		(\$4,000 X .97)		
	July 15	Accounts Payable.....	3,880	
		Cash		3,880

(b) Invoice paid on July 31

(1)	July 11	Purchases	4,000	
		Accounts Payable.....		4,000
	July 31	Accounts Payable.....	4,000	
		Cash		4,000
(2)	July 11	Purchases	3,880	
		Accounts Payable.....		3,880
		(\$4,000 X .97)		
	July 31	Accounts Payable.....	3,880	
		Purchase Discounts Lost.....	120	
		Cash		4,000
		(Discount lost on purchase of July 11, \$4,000, terms 3/10, n/30)		

BRIEF EXERCISE 8-4 (Continued)

(c)

If Serafina is a private company reporting under ASPE:

Under ASPE, the only requirement is that the amount of interest be disclosed if it is capitalized into the cost of inventory. Therefore, Serafina can choose to add the interest costs to the product costs.

(d)

If Serafina is a public company:

Under IFRS, interest costs incurred for inventory are capitalized if the inventory takes a long time to produce or manufacture – such as wine production. Additionally, if the interest costs relate to inventory manufactured in large quantities on a repetitive basis, a choice is permitted for capitalization.

BRIEF EXERCISE 8-5

December 31 inventory per physical count	\$2,000
Less: inventory on consignment for Delhi	(500)
Add:	
Goods-in-transit purchased FOB shipping point	400
Goods-in-transit sold FOB destination	<u>180</u>
December 31 inventory	<u>\$2,080</u>

BRIEF EXERCISE 8-6

- (a) Vendor rebates are recorded as a reduction to the cost of inventory when the rebate is “realizable”. Under the conceptual framework, the definition of an ‘asset’ and the recognition criteria must be satisfied.

If the rebate is discretionary on the part of the supplier (Traders), the definition and recognition criteria are not fulfilled. The rebate will only be recorded when the cash is received or Traders acknowledges that payment will be made.

If Doors Unlimited can reasonably estimate the amount of the rebate and receipt of the rebate is probable, an accrual can be made in advance. The amount recognized is the proportional amount relative to the total transactions to date.

- (b) The amount that should be accrued is the expected rebate amount per unit for the calendar year multiplied by the number of units purchased to date.

The annual amount of the rebate expected is:

3,000 units to date X 2 = 6,000 units

Excess of the total units over the base amount of 3,500 is 2,500 X
\$0.25 = total rebate of \$625.00

The amount of purchases to date is half of the total amount of expected annual purchases. Consequently, accrue a rebate receivable at June 30, 2014 of half of the total expected rebate or
 $\$625 \times .5 = \$312.50$

- (c) Per unit price to be used for costing:

Invoice price paid 3,000 units at \$2.50 =	\$7,500.00
Less rebate	<u>312.50</u>
Net cost	<u>\$7,187.50</u>
Divided by units purchased to date	3,000
Per unit cost	\$2.3958

BRIEF EXERCISE 8-7

Cost of goods sold as reported	\$2,400,000
Overstatement of 12/31/13 inventory	(155,000)
Overstatement of 12/31/14 inventory	<u>45,000</u>
Corrected cost of goods sold	<u><u>\$2,290,000</u></u>
12/31/14 Retained Earnings as reported	\$4,200,000
Overstatement of 12/31/14 inventory	<u>(45,000)</u>
Corrected 12/31/14 retained earnings	<u><u>\$4,155,000</u></u>

BRIEF EXERCISE 8-8

Group	Number of CDs	Sales Price	Total Sales Price	Relative Sales Price	Total Cost	Cost Allocated	Cost per CD
1	100	\$ 5	\$ 500	5/100	\$7,500	\$ 375	\$3.75
2	800	\$10	8,000	80/100	\$7,500	6,000	\$7.50
3	100	\$15	<u>1,500</u>	15/100	\$7,500	<u>1,125</u>	\$11.25
			<u><u>\$10,000</u></u>			<u><u>\$7,500</u></u>	

BRIEF EXERCISE 8-9

(a) Periodic Weighted Average

$$\text{Weighted average cost per unit} = \frac{\$14,000}{1,000} = \underline{\underline{\$14.00}}$$

$$\text{Ending inventory } 400 \times \$14 = \underline{\underline{\$5,600}}$$

$$\text{Cost of goods available for sale} \quad \$14,000$$

$$\text{Deduct ending inventory} \quad \underline{5,600}$$

$$\text{Cost of goods sold} \quad \underline{\underline{\$8,400}}$$

Or, Cost of goods sold

$$600 \text{ units sold} \times \$14.00 = \underline{\underline{\$8,400}}$$

(b) Periodic FIFO

$$\text{June 23} \quad 400 \times \$15 = \$6,000$$

$$\text{Ending inventory} \quad \begin{array}{r} 400 \\ \text{units} \end{array} \quad \underline{\underline{\$6,000}}$$

$$\text{Cost of goods available for sale} \quad \$14,000$$

$$\text{Deduct ending inventory (400 X \$15)} \quad \underline{6,000}$$

$$\text{Cost of goods sold} \quad \underline{\underline{\$8,000*}}$$

Alternatively, cost of goods sold = (200 X \$12) + (400 X \$14) = \$8,000.

BRIEF EXERCISE 8-9 (Continued)

(c) Specific Identification

Cost of Goods Sold:

$$200 \times \$12 = \$2,400$$

$$300 \times \$14 = 4,200$$

$$\underline{100 \times \$15 = 1,500}$$

$$\$ 8,100$$

**Cost of goods available for
sale**

\$14,000

Deduct cost of goods sold

8,100

Ending inventory

\$ 5,900

Or, ending inventory: $(100 \times \$14) + (300 \times \$15) =$

\$ 5,900

BRIEF EXERCISE 8-10

(a)

Perpetual moving average cost:

Date	Purchased			Sold			Balance		
	No. of units	Unit cost	Amount	No. of units	Unit cost	Amount	No. of units	Unit cost	Amount
Nov 1	250	\$12	\$3,000				250	\$12.00	\$ 3,000
Nov 15	400	14	5,600				650	13.23 (1)	8,600
Nov 19				600	\$13.23	\$7,938	50	13.23	662
Nov 23	350	15	5,250				400	14.78 (2)	5,912

Cost of Goods sold: \$7,938

Ending Inventory Nov 30: \$5,912

(1) $\frac{(\$3,000 + \$5,600)}{(250 \text{ units} + 400 \text{ units})} = \$ 13.23$

(2) $\frac{(\$662 + \$5,250)}{(50 \text{ units} + 350 \text{ units})} = \$ 14.78$

(b) Perpetual First-in, first out.

Date	Purchased		Sold			Balance		
	No. of units	Unit cost	No. of units	Unit cost	Amount	No. of units	Unit cost	Amount
Nov 1	Beg. Bal.					250	\$12	\$ 3,000
Nov 15	400	14				250	12	} 8,600
						400	14	
Nov 19			250	12	3,000			
			350	14	4,900	50	14	700
Nov 23	350	15				50	14	} 5,950
						350	15	
					\$7,900			

Cost of Goods sold: \$7,900

Ending Inventory Nov 30: \$5,950

BRIEF EXERCISE 8-11

a) Assuming public company reporting under IFRS:

<u>Item</u>	<u>Cost</u>	<u>Estimated Selling Price</u>	<u>Estimated Disposal Costs</u>	<u>NRV</u>	<u>LC and NRV</u>
Neutrinos	\$1,820	\$2,100	\$100	\$2,000	\$1,820
Ocillinos	5,000	4,900	100	4,800	4,800
Electrons	4,290	4,625	200	4,425	4,290
Protons	3,200	4,210	100	4,110	3,200
	<u>\$14,310</u>			<u>\$15,335</u>	<u>\$14,110</u>

(b) Assuming Antimatter is a private company reporting under ASPE:

There would be no difference in accounting.

BRIEF EXERCISE 8-12

(a) Dec 31, 2013

(1) Direct method

Cost of Goods Sold	7,075	
Inventory		7,075
(\$68,700 less \$61,625).		

Note that the inventory would have been written down to \$54,000 in 2012 and this amount would be booked to CGS in 2013 when the inventory was sold.

(2) Indirect method

Loss on Inventory Due to Decline in NRV	5,475	
Allowance to Reduce Inventory to NRV		5,475

(\$68,700 less \$61,625) \$7,075 less allowance balance from December 31, 2012 of \$1,600 (\$55,600 - \$54,000). Since the opening inventory has been sold, the original cost of \$55,600 has been booked to CGS. Under this method, the original cost is preserved and the write-down is effected through an adjustments to the allowance account.

(b) Dec 31, 2014

(1) Direct method

No entry needed as cost is lower than NRV. The opening inventory of \$61,625 (NRV) would have been booked to CGS when sold in 2014.

(2) Indirect method

Allowance to Reduce Inventory to NRV	7,075	
Recovery of Loss on Inventory Due to Decline in NRV.....		7,075
Balance December 31, 2013 of \$7,075 (\$68,700 - \$61,625)		

BRIEF EXERCISE 8-12 (Continued)

Any 'gain' under the indirect method is the excess of the credit effect of closing the beginning allowance over the debit effect of setting up the current year-end allowance. Recovering the loss up to original cost is permitted, but it may not exceed the original cost. Remember that the cost of the opening inventory (\$68,700) would have been booked to CGS in 2014 when the opening inventory is sold. The JE shown above adjusts the allowance account to zero and also offsets the higher "cost based" CGS.

BRIEF EXERCISE 8-13

(a)

Loss on Purchase Contracts	35,000	
Liability for Onerous Contracts		35,000

This assumes that the company expects it will incur a loss equal to the excess price it will have to pay above the market rate.

(b)

Raw Materials	1,965,000	
Liability for Onerous Contracts	35,000	
Cash.....		2,000,000

The entry in part (a) in effect recognized the loss on the commitment (lower of cost and NRV) at December 31. The entry in (b) recognizes the inventory at its revised “cost”. Any of this inventory that is sold in the period (and the cost of goods sold) will be based on this “cost” and a gross profit or loss will result. Any of the inventory remaining at the next balance sheet date will be reviewed for the lower of cost and net realizable value at that date and it will be adjusted accordingly. Alternatively, the inventory could be written down as soon as the acquisition is made so that it reflects the lower value of \$1,915,000 at the date of acquisition. The \$50,000 could be booked as an additional loss on contract. Either way, the \$50,000 loss/cost is reflected in the period if the inventory has been sold (either as part of CGS or as a Loss on Purchase Contracts)..

(c)

Under IFRS, if the unavoidable costs to complete a contract are higher than the benefits expected from receiving the goods under the contract, a loss provision is recognized as an onerous contract. Although ASPE does not have a similar requirement, practice in Canada has been to record the loss and liability as well. In essence, the accounting is the same.

BRIEF EXERCISE 8-14

(a) Inventory is generally reported at lower of cost and net realizable value. This works well for most industries. However, there are a few industries where reporting inventories at net realizable value, even if it above cost, is more appropriate. In such cases, the following criteria are necessary:

- **The sale is assured or there is an active market for the product**
- **The disposal costs are estimable**

(b) Under ASPE , biological assets such as sheep and produce at the point of harvest (such as wool) are excluded from the measurement standards of Section 3031 to the extent they are measured at NRV in accordance with established practice in that industry. Otherwise, the general provisions of accounting for inventory are used, i.e. use a lower of cost and net realizable value approach. These assets still must follow the expense recognition and disclosure requirements under Section 3031.

The carpet would be accounted for at the lower of cost and net realizable value in accordance with Section 3031 (i.e. it is not excluded from any of the requirements).

(c) There is specific guidance under IFRS for biological assets such as the sheep and the agricultural produce such as the wool (IAS 41). IAS 41 provides that such inventories are measured at fair value less costs to sell.

BRIEF EXERCISE 8-15

Beginning inventory		\$ 310,000
Purchases		<u>780,000</u>
Cost of goods available		1,090,000
Sales	\$1,100,000	
Less gross profit (31% X \$1,100,000)	<u>341,000</u>	
Estimated cost of goods sold		<u>759,000</u>
Estimated ending inventory destroyed in explosion		<u><u>\$ 331,000</u></u>

BRIEF EXERCISE 8-16

$$\begin{aligned}
 \text{Inventory Turnover Ratio} &= \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} \\
 &= \frac{\$35,350}{(\$5,310 + \$5,706)/2} \\
 &= 6.42 \text{ times per year} \\
 \\
 \text{Average days to sell inventory} &= \frac{365}{\text{Inventory Turnover Ratio}} \\
 &= \frac{365}{6.42 \text{ times}} \\
 &= 56.85 \text{ days}
 \end{aligned}$$

***BRIEF EXERCISE 8-17**

	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$ 22,000	\$ 30,000
Net purchases	157,500	215,000
Net mark-ups		<u>10,000</u>
Total merchandise available for sale	<u>\$179,500</u>	<u>255,000</u>
Deduct:		
Net markdowns		7,000
Sales		<u>184,500</u>
Ending inventory at retail		<u>\$ 63,500</u>

Cost-to-retail ratio: $\$179,500 \div \$255,000 = \underline{70.4\%}$

Ending inventory at lower of average cost and market
 $(70.4\% \times \$63,500) = \underline{\$ 44,704}$

BRIEF EXERCISE 8-18

- a) Yes, as raw materials inventory
- b) Yes, in retail inventory
- c) Yes, in work in progress
- d) Yes, a form of raw materials inventory
- e) No, this would be included in capital assets as it is equipment, not intended for sale.
- f) Yes, as a contract in progress
- g) Yes, as miscellaneous supplies inventory

BRIEF EXERCISE 8-19

Benefits of a just in time system include reduced inventory holding costs, such as warehouse space and storage, insurance, obsolete inventory, theft, the investment cost, etc.

The risks of a tight inventory management system generally result from stockouts. If the goods are not available in the store, the company loses a potential sale and creates an unhappy customer.

BRIEF EXERCISE 8-20

a) Under IFRS?

Primary sources of GAAP include IAS 2 – Inventories, IAS 32 and IAS 39 - financial instruments, IAS 11 – construction contracts, IAS 41 - Agriculture

b) Under ASPE?

Primary sources of GAAP include Section 3031 – Inventories, Section 3856 - financial instruments, 3400 – construction contracts. There is no separate guidance under ASPE for inventory of agricultural goods.

BRIEF EXERCISE 8-21

June 30th

a) May 1 – 31

Biological Assets	1,000	
Cash		1,000
Biological Assets	150	
Accounts Payable		150

b) June 30, 2014

Biological Assets	150	
Accounts Payable		150

Cost of hatchlings	\$1,000
Costs of feed and labour	<u>300</u>
Total costs incurred to date	<u>1,300</u>

Fair Value

Current fair value	1,800
Less transportation costs	<u>300</u>
Fair value less costs to sell	<u>\$1500</u>

Year End Adjustment 1500 – 1300 = 200

Biological Assets	200	
Unrealized Gain or Loss		200

BRIEF EXERCISE 8-21 (Continued)

- c) Under ASPE , there is no specific guidance for accounting for Biological assets. Section 3031 notes that these assets are excluded from the measurement requirements of Section 3031 if measured at NRV in accordance with well-established industry practice. Otherwise Section 3031 is applied and the chicks would be measured at \$1,300. There would be no JE to adjust the assets up to the \$1,500 fair value less costs to sell.

BRIEF EXERCISE 8-22

- (a) Inventory 100
 Interest Payable 100

Since the interest is capitalized, it is recorded as part of the cost of the inventory of wine.

- (b) Under ASPE, companies can choose to either capitalize or expense the interest.

If a company chooses to expense the interest:

- Dr Interest Expense 100
 Cr Interest payable 100

If a company chooses to capitalize the interest, the entry will be the same as shown in part (a)

SOLUTIONS TO EXERCISES

EXERCISE 8-1 (15-25 minutes)

(a)	July 4	Accounts Receivable.....	1,440	
		Sales Revenue (80 X \$18)....		1,440
	July 11	Purchases (150 X \$16.50).....	2,475	
		Accounts Payable.....		2,475
	July 13	Accounts Receivable.....	2,250	
		Sales Revenue (120 X \$18.75)		2,250
	July 20	Purchases (160 X \$17).....	2,720	
		Accounts Payable.....		2,720
	July 27	Accounts Receivable.....	2,000	
		Sales Revenue(100 X \$20)...		2,000
	July 31	Inventory (\$17 X 110).....	1,870	
		Cost of Goods Sold	4,825	
		Purchases (\$2,475 + 2,720) .		5,195
		Inventory (100 X \$15).....		1,500
(b)	Sales Revenue(\$1,440 + \$2,250 + \$2,000)		\$5,690	
	Cost of goods sold		<u>4,825</u>	
	Gross profit		<u>\$ 865</u>	
(c)	For a periodic system, the journal entry would be			
		Inventory (\$17 X 102)	1,734	
		Cost of Goods Sold	4,961	
		Purchases (\$2,475 + 2,720)		5,195
		Inventory (100 X \$15)		1,500

EXERCISE 8-1 (Continued)

(c) (Continued)

Therefore, the loss would be buried in Cost of Goods Sold assuming there are no accounting records available against which to compare the physical count. Alternately, if the company maintains a modified perpetual system, with accounting records tracking inventory in units, the company would then be able to identify the shortage and report it separately in the Other Expenses and Losses section of the income statement. The loss of 8 units (110 - 102) or \$136 (8 X \$17) would then be recorded as inventory shrinkage to Inventory Over and Short and the Inventory account (ending) would be credited. If the shortage were caused by incorrect record keeping, the Inventory Over and Short would be included in Cost of Goods Sold.

EXERCISE 8-1 (Continued)

(d)

July 4	Accounts Receivable.....	1,440	
	Sales Revenue(80 X \$18).....		1,440
	Cost of Goods Sold	1,200	
	Inventory (80 X \$15).....		1,200
July 11	Inventory	2,475	
	Accounts Payable (150 X \$16.50)		2,475
July 13	Accounts Receivable.....	2,250	
	Sales Revenue (120 X \$18.75).....		2,250
	Cost of Goods Sold	1,950	
	Inventory [(20 X \$15) + (100 X \$16.50)].....		1,950
July 20	Inventory	2,720	
	Accounts Payable (160 X \$17)		2,720
July 27	Accounts Receivable.....	2,000	
	Sales Revenue(100 X \$20).....		2,000
	Cost of Goods Sold	1,675	
	Inventory [(50 X \$16.50) + (50 X \$17)].....		1,675
(e)	Sales Revenue	\$5,690	
	Cost of goods sold		
	(\$1,200 + \$1,950 +\$1,675)	<u>4,825</u>	
	Gross profit	<u>\$ 865</u>	

EXERCISE 8-1 (Continued)

- (f) Since the loss can be identified, the company would be able to identify the shortage and report it separately in the Other Expenses and Losses section of the income statement. The loss of 8 units would be recorded as inventory shrinkage to Inventory Over and Short and the Inventory account (ending) would be credited. If incorrect record keeping caused the shortage, the Inventory Over and Short would be included in Cost of Goods Sold.**

EXERCISE 8-2 (10-20 minutes)

	2013	2014	2015
Sales	\$290,000	\$360,000	\$410,000
Sales returns	6,000	13,000	10,000
Net sales	284,000	347,000	400,000
Beginning inventory	20,000	32,000	37,000**
Ending inventory	32,000*	37,000	34,000
Purchases	247,000	260,000	298,000
Purchase returns and allowances	5,000	8,000	10,000
Transportation-in	8,000	9,000	12,000
Cost of good sold	238,000	256,000	303,000
Gross profit on sales	46,000	91,000	97,000

*This was given as the beginning inventory for 2014.

**This can be calculated as the ending inventory for 2014.

EXERCISE 8-3 (15-20 minutes)

(a)	March 10	Purchases	24,250	
		Accounts Payable.....		24,250
		($\\$25,000 \times .97$)		
	March 11	Purchases	26,309	
		Accounts Payable.....		26,309
		($\\$26,575 \times .99$)		
	March 19	Accounts Payable.....	24,250	
		Cash		24,250
	March 24	Purchases	11,155	
		Accounts Payable		
		($11,500 \times .97$).....		11,155
(b)	March 31	Purchase Discounts Lost.....	266	
		Accounts Payable		
		($\\$26,575 \times .01$).....		266
		(Discount lost on purchase of March 11, \$26,575, terms 1/15, n/30)		

EXERCISE 8-3 (Continued)

(c)	March 10	Purchases	25,000	
		Accounts Payable.....		25,000
	March 11	Purchases	26,575	
		Accounts Payable.....		26,575
	March 19	Accounts Payable.....	25,000	
		Purchase Discounts		750
		Cash		24,250
	March 24	Purchases	11,500	
		Accounts Payable.....		11,500

(d) No entry is required at March 31 as the account balances are properly stated. It is not yet known if the discount on the March 24 purchase will be earned.

(e) From the perspective of the general manager, the net method provides additional information that is valuable in managing the business. Under the net method, the amount of purchase discounts lost is highlighted and quantified. Under the gross method, only discounts that are taken are recorded. The general manager would therefore have no means of determining the instances where the discounts were lost. Purchase discounts lost should be scrutinized carefully to determine the reason why this occurred. Plans can then be put into place to take advantage of any discounts in the future. These plans would include securing operating lines of credit that can be used in the short term to earn purchase discounts when offered by suppliers, or streamlining the accounting process so that payments can be processed quickly in order to take advantage of the discounts.

EXERCISE 8-4 (10-15 minutes)

(a)

Inventory per physical count.....	\$441,000
Goods in transit to customer, f.o.b. destination	+ 33,000
Goods in transit from vendor, f.o.b. shipping point	+ <u>51,000</u>
Inventory to be reported on balance sheet.....	\$525,000

Item 1 - The consigned goods of \$61,000 are not owned by Solaro and were properly excluded.

Item 3 - The goods in transit to a customer of \$46,000, shipped f.o.b. shipping point, are properly excluded from the inventory because the title to the goods passed when they left the seller and therefore a sale and related cost of goods sold should be recorded in 2014.

Item 4 - The goods in transit from a vendor of \$73,000, shipped f.o.b. destination, are properly excluded from the inventory because the title to the goods does not pass to Solaro until the buyer (Solaro) receives them.

Item 6 - Storage costs to store excess inventory cannot be inventoried; i.e., these charges must be expensed as a period cost. Storage costs can only be added to the cost of inventory if they are necessary in the production process – i.e. wine making process).

Item 7 - Interest costs that are incurred from delayed purchase plans for inventories that are ready for sale or use are not product costs.

EXERCISE 8-4 (Continued)

(b) Private company:

Under ASPE, the only requirement is that the amount of interest be disclosed if it is capitalized as part of the cost of inventory. Therefore, Solaro can choose to add the interest costs to the product costs. But, following basic principles, ordinary financing costs would not qualify as an inventoriable product cost. Therefore, it would have to be in similar circumstances to those found under IFRS standards.

(c) A public company:

Under IFRS, interest costs incurred for inventory are capitalized if the inventory takes a long time to produce or manufacture – such as wine production. Additionally, if the interest costs relate to inventory manufactured in large quantities on a repetitive basis, a choice is permitted for capitalization.

EXERCISE 8-5 (10-15 minutes)

(a)

1.	Raw Materials	8,100	
	Accounts Payable.....		8,100
2.	No adjustment necessary.		
3.	Raw Materials	28,000	
	Accounts Payable.....		28,000
4.	Accounts Payable.....	7,500	
	Raw Materials		7,500
5.	Raw Materials	19,800	
	Accounts Payable.....		19,800

Item 6 represents a special sales agreement between the supplier and Motuto Machine. In this arrangement, the supplier has simply 'parked' its inventory with Motuto's for a short purpose and has agreed to buy it back in January (presumably after the supplier's year end). The risks and rewards of ownership have not passed to Motuto, this inventory should remain the supplier's books at December 31, 2014. See further discussion below under (b) regarding the ethics.

Item 7 represents consignment inventory. Motuto does not record this as inventory on its books at December 31, 2014. The inventory belongs to Able and should be recorded on its books at December 2014.

Item 1 should be reversed, since the journal entry was also made on Jan 2. Item 4 also has to be reversed. The invoice was entered in December in error, so the entry above reverses it. The original entry therefore has to be re-established in January – a reversal of the entry above.

EXERCISE 8-5 (Continued)

- (b) With respect to item 4, it is possible that Motuto's supplier has made a clerical error in this case by issuing an invoice dated December 30, 2014 prior to the shipment of the goods on January 2, 2015. Motuto should point out this error, particularly if discount terms apply to the purchase. One must also consider the possibility that Motuto's supplier is trying to manipulate its financial results for its fiscal year ended December 31, 2014. They may be attempting to include a sale in their fiscal year while at the same time including the merchandise inventory on their balance sheet. This would indicate that the supplier is not acting legally and ethically and Motuto should reconsider whether or not they wish to do business with this supplier in the future.**

With respect to item 5, Motuto should contact its supplier about the earlier-than-contracted delivery of materials. On this occasion, Motuto has accepted delivery so it appears that they are Motuto's goods at December 31. However, the supplier should be informed that this practice is not acceptable in the future. Here the ethical issue may be with the supplier: did they arrange for an early delivery in order to increase their current year sales, for example, or was it in error?

With respect to item 6, Motuto should ensure that there is a valid business reason for holding these items (i.e. that the supplier warehouse was indeed full). They should also question why a sale and repurchase agreement has been issued. If they are indeed just helping out with storing the goods there is no need to formally record a sale and repurchase.

EXERCISE 8-6 (15-20 minutes)

(a)	Inventory December 31, 2014 (unadjusted)	\$234,890
	Transaction 2	10,420
	Transaction 3	-0-
	Transaction 4	-0-
	Transaction 5	8,540
	Transaction 6	(10,438)
	Transaction 7	(11,520)
	Transaction 8	1,500
	Transaction 9	<u>12,500</u>
	Inventory December 31, 2014 (adjusted)	<u>\$245,892</u>

Transaction 9 represents a special sales agreement. If Jaeco cannot make a reasonable prediction for the amount of potential returns from Simply, then the sale is not valid and the goods cannot be considered sold, irrespective of the shipping terms. The inventory will remain on Jaeco's books at December 31, 2014.

EXERCISE 8-6 (Continued)

(b) Transaction 3

Sales Revenue	12,800	
 Accounts Receivable		12,800
(To reverse sale entry in 2014)		

Transaction 4

Purchases	15,630	
 Accounts Payable.....		15,630
(To record purchase of merchandise in 2014)		

Transaction 8

Sales Returns.....	2,600	
 Accounts Receivable		2,600
(To record sales return)		

Transaction 9

**Note the sale would be reversed and
recognized on a cash basis (as discussed in
chapter 6)**

EXERCISE 8-7 (15-20 minutes)

- (a) Items 1, 3, 5, 8¹, 10, 13, 15, 16, 18, 19, 20, 22, 23, and 26 would be reported as inventory in the financial statements.**

Explanations

- 23. Normal waste or spoilage of raw materials during production would be included in the material cost of the product; i.e., inventoriable cost.**
- 26. These costs can be capitalized since storage is a necessary part of the production process.**
- 27. Under ASPE, decommissioning or restoration costs are added to the cost of the related natural resource asset (discussed further in Chap 10 and 13).**

These costs may be capitalized if a company elects to do so:

- 11. Interest costs incurred for inventories may be capitalized.**

The following items would not be reported as inventory:

- 2. Cost of goods sold in the income statement**
- 4. Not reported in the financial statements as not yet received**
- 6. Cost of goods sold in the income statement**
- 7. Cost of goods sold in the income statement**
- 9. Selling expense for freight out**
- 12. Advertising expense in the income statement**
- 14. Office supplies in the current asset section of the balance sheet**
- 17. Not reported in the financial statements as not owned**

¹ Freight charges costs are not always allocated between inventory and cost of goods sold. They are sometimes expensed completely in the year incurred out of expediency.

EXERCISE 8-7 (Continued)

- 21. Temporary investments in the current asset section of the balance sheet**
 - 24. Abnormal levels of waste of raw materials cannot be included in the carrying amount of inventory; i.e., these must be expensed as incurred as a period cost.**
 - 25. Storage costs to store excess inventory cannot be inventoried; i.e., these charges must be expensed as a period cost.**
- (b) Under IFRS, the treatment for borrowing costs differs from ASPE. Interest expenses are considered product costs if the inventory takes a long time to produce or manufacture. Capitalization is not required for interest expenses relating to inventories manufactured in large quantities or produced on a repetitive basis; a company can choose to capitalize as an accounting policy choice.**

Additionally, under IFRS, decommissioning costs incurred as part of the production process are treated as product costs and inventoriable.

EXERCISE 8-8 (15-25 minutes)

	<u>Current Year</u>	<u>Subsequent Year</u>
1. Working capital	Overstated by \$1,020	No effect
Current ratio	Overstated	No effect
Retained earnings	Overstated by \$1,020	No effect
Net income	Overstated by \$1,020	Understated by \$1,020
2. Working capital	No effect	No effect
Current ratio	Overstated	No effect
Retained earnings	No effect	No effect
Net income	No effect	No effect
3. Working capital	Overstated by \$850	No effect
Current ratio	Overstated	No effect
Retained earnings	Overstated by \$850	No effect
Net income	Overstated by \$850	Understated by \$850

EXERCISE 8-9 (10-15 minutes)

- (a)**
- 1. Net income for 2013 is overstated by \$51,000 because beginning inventory is understated.**
 - 2. Net income for 2013 is overstated by \$2,400 because purchases are omitted.**
 - 3. Net income is overstated by \$1,000 because ending inventory is overstated.**
- (b)**
- 1. No effect.**
 - 2. Accounts payable understated, retained earnings overstated, \$2,400.**
 - 3. Inventory is overstated by \$1,000 and retained earnings are overstated, \$1,000.**

EXERCISE 8-10 (20-25 minutes)

(a)

Errors in Inventories

<u>Year</u>	<u>Net Income Per Books</u>	<u>Add Over- statement Jan. 1</u>	<u>Deduct Under- statement Jan. 1</u>	<u>Deduct Over - statement Dec. 31</u>	<u>Add Under- statement Dec. 31</u>	<u>Corrected Net Income</u>
2008	\$ 50,000			\$5,000		\$ 45,000
2009	52,000	\$5,000		9,000		48,000
2010	54,000	9,000			\$11,000	74,000
2011	56,000		\$11,000			45,000
2012	58,000				2,000	60,000
2013	<u>60,000</u>		2,000	10,000		<u>48,000</u>
	<u>\$330,000</u>					<u>\$320,000</u>

(b)

	<u>Original Net Income</u>	<u>Balance Retained Earnings</u>	<u>Corrected Net Income</u>	<u>Revised Retained Earnings</u>
2008	\$ 50,000	\$ 50,000	\$ 45,000	\$ 45,000
2009	52,000	102,000	48,000	93,000
2010	54,000	156,000	74,000	167,000
2011	56,000	212,000	45,000	212,000
2012	58,000	270,000	60,000	272,000
2013	<u>60,000</u>	\$ 330,000	<u>48,000</u>	\$ 320,000
	<u>\$ 330,000</u>		<u>\$ 320,000</u>	

EXERCISE 8-10 (Continued)

- (c) Manipulation of ending inventory is definitely indicated given the positive trend in net income created by the inventory errors. Management can apply judgment in the valuation of ending inventory in different ways in order to smooth income over the reporting periods as appears to be the case for Lyondell Industries Limited. In financially successful years, reserves (sometimes referred to as “cookie jar reserves”) are used. These reserves are created by management by recording accruals for loss of utility or impairment of inventory in order to buffer for downturns in performance expected in the future. In less successful years, these reserves or accruals are reversed and result in recoveries, which in turn increase income. When results that follow a cycle are expected, management is often tempted to apply these techniques to create income smoothing and avoid having to explain to users the large variances in performance from year to year or cycle to cycle.**

EXERCISE 8-11 (15-20 minutes)

1. Reporting under ASPE:

(a)

Net realizable value	$\$50 - \$19 = \$31$
Cost	\$45
Lower of cost and NRV	\$31

$\$35$ figure used – $\$31$ correct value per unit = $\$4$ per unit.

$\$4 \times 1,000$ units = $\$4,000$.

If ending inventory for 2014 is overstated, net income for 2014 will be overstated.

- (b) Net income for 2015 is understated by $\$4,000$ because the beginning inventory was overstated by $\$4,000$ causing a corresponding overstatement in cost of goods sold.
- (c) The current ratio at December 31, 2014 would be overstated since the inventory would be overstated. The inventory turnover for the year ending December 31, 2014 would be understated because the numerator, Cost of goods sold is understated and the denominator in the ratio calculation would be overstated (divided by 2). The debt to total asset ratio at December 31, 2014 would be understated since the denominator, total assets in the ratio would be overstated.

The current ratio at December 31, 2015 would not be affected by an error in inventory at the end of fiscal 2014. The effect on the inventory turnover for the year ending December 31, 2015 cannot be determined. The numerator would be overstated by $\$4,000$ and the denominator in the ratio calculation would be overstated by $\$2,000$. But, depending on the original numbers, the ratio could get smaller, larger, or stay the same. Because most inventory turns over more than twice a year (i.e. $4,000/2,000$), it is likely that the error would make the turnover lower than it actually was. The debt to total asset ratio at December 31, 2015 would not be affected by an error in inventory at the end of fiscal 2014.

EXERCISE 8-11 (Continued)

- (d) If the error is discovered before closing entries are made and the release of the financial statements, then it must be corrected by management and a corresponding reduction of inventory recorded.**

If we assume that the financial statements have already been released the opportunity to correct the error is denied. Management must then follow the correction of error treatment and adjust the opening balance of retained earnings for the effect of the error, net of applicable taxes. The correction of the error would be shown in the following year's financial statements.

- (e) Reporting under IFRS:
Response would remain unchanged.**

EXERCISE 8-12 (15-20 minutes)

	No.	Selling	Total	Relative sales	Total	Cost	Cost
	of lots	price	sales	value	Cost *	Allo-	Per
		per lot	value			cated	Lot
Gr.1	9	\$3,500	\$ 31,500	\$31,500/\$139,800	\$89,460	\$20,157	\$2,240
Gr.2	15	4,500	67,500	\$67,500/\$139,800	89,460	43,194	2,880
Gr.3	17	2,400	40,800	\$40,800/\$139,800	89,460	26,109	1,536
			<u>\$139,800</u>			<u>\$89,460</u>	

$$* \$55,000 + \$34,460 = \$ 89,460$$

	Units	Lot	Total	Cost	Cost of
	sold	selling	sales	per lot	lots sold
		price			
Group 1	(9-5) = 4	\$ 3,500	\$ 14,000	\$ 2,240	\$ 8,960
Group 2	(15-7) = 8	4,500	36,000	2,880	23,040
Group 3	(17-2) = 15	2,400	36,000	1,536	23,040
			<u>\$ 86,000</u>		<u>\$55,040</u>

Inventory at end of year:

	<u>Costs allocated</u>	<u>Cost of</u>	<u>Cost of</u>
		<u>lots sold</u>	<u>ending</u>
			<u>inventory</u>
Group 1	\$20,157	4 @ 2,240= \$ 8,960	\$11,197
Group 2	43,194	8 @ 2,880= 23,040	20,154
Group 3	<u>26,109</u>	15 @ 1,536= <u>23,040</u>	<u>3,069</u>
	<u>\$89,460</u>	<u>\$ 55,040</u>	<u>\$34,420</u>

EXERCISE 8-12 (Continued)

Proof:

	<u>Unsold lots</u>	<u>Cost per lot</u>	<u>Total inventory</u>
Group 1	5	\$ 2,240	\$ 11,200
Group 2	7	2,880	20,160
Group 3	2	1,536	3,072
			<u><u>\$ 34,432 *</u></u>

*\$34,432 - \$34,420 = \$12 rounding difference because unit cost is rounded to nearest dollar.

Net income for the year:

Sales	\$ 86,000
Cost of sales	<u>55,040</u>
Gross profit	30,960
Operating expenses	<u>18,200</u>
Net income	<u><u>\$ 12,760</u></u>

EXERCISE 8-13 (20-25 minutes)

(a)	No. of Chairs	Unit Selling Price	Total Sales Value	% of Total Value	Total Allocated Cost *	Per Unit Cost
Lounge chairs	400	\$ 95	\$38,000	37.3%	\$22,324.05	\$55.81
Armchairs	300	85	25,500	25.0%	14,962.50	49.88
Straight chairs	700	55	<u>38,500</u>	37.7%	<u>22,563.45</u>	32.23
			<u>\$102,000</u>		<u>\$59,850.00</u>	

* Percentage of total value applied to lump sum of \$59,850 paid

Beginning Balance (cost above) \$59,850.00

Sales	No. of Chairs	Per Unit Cost	Cost of Goods Sold	
Lounge chairs	350	\$55.81	\$19,533.50	
Armchairs	210	49.88	10,474.80	
Straight chairs	120	32.23	<u>3,867.60</u>	
			<u>33,875.90</u>	<u>(33,875.90)</u>

Cost of chairs remaining at end of 2014 \$25,974.10

OR: Cost of chairs remaining:

Lounge chairs: (400 – 350) X \$55.81	=	\$ 2,790.50
Armchairs: (300 – 210) X \$49.88	=	4,489.20
Straight chairs: (700 – 120) X \$32.23	=	<u>18,693.40</u>
Cost of ending inventory		<u>\$25,973.10*</u>

*\$1.00 difference due to rounding

EXERCISE 8-13 (Continued)

OR: Cost ratio:
$$\frac{\$59,850}{\$102,000} = 58.7\%.$$

Beginning Balance (cost above) **\$ 59,850.00**

Less: Cost of Goods Sold:

Sales	No. of Chairs	Selling Price	Sales		
Lounge chairs	350	\$95	\$33,250		
Armchairs	210	85	17,850		
Straight chairs	120	55	6,600		
			<u>57,700</u>	X 58.7%	<u>(33,870.00)</u>
Ending Inventory					<u>\$ 25,980.00</u>

(b)

	No. of Chairs	Discounted Selling Price	Selling Cost	NRV Per Unit	Net Realizable Value
Lounge chairs	50	\$ 71.25 *	\$ 2.00	\$ 69.25	\$ 3,462.50
Armchairs	90	59.50 **	2.00	57.50	5,175.00
Straight chairs	580	33.00 ***	2.00	31.00	17,980.00
Net realizable value of chairs in inventory					<u>\$26,617.50</u>

* \$95 x 75% = \$71.25

** \$85 X 70% = \$59.50

*** \$55 X 60% = \$33.00

EXERCISE 8-13 (Continued)

(c)

	No. of Chairs	Per Unit Cost	Cost	Net Realizable Value	Lower of Cost and NRV
Lounge chairs	50	\$55.81	\$2,790.50	\$ 3,462.50	\$2,790.50
Armchairs	90	49.88	4,489.20	5,175.00	4,489.20
Straight chairs	580	32.23	18,693.40	17,980.00	17,980.00
Inventory value at December 31, 2014 at LC and NRV					<u>\$25,259.70</u>

EXERCISE 8-14 (15-20 minutes)

(a) Beginning inventory	1,000
Purchases (2,000 + 3,000)	<u>5,000</u>
Goods available for sale	6,000
Sold (2,500 + 2,000)	<u>4,500</u>
Goods on hand	<u>1,500</u>

Periodic FIFO – (Same amount for Perpetual FIFO)

1,000 X \$12 =	\$12,000
2,000 X \$18 =	36,000
<u>1,500 X \$23 =</u>	<u>34,500</u>
<u>4,500</u>	<u>\$82,500</u>

(b) Periodic weighted average

1,000 X \$12 =	\$ 12,000		
2,000 X \$18 =	36,000		
<u>3,000 X \$23 =</u>	<u>69,000</u>		4,500
<u>6,000</u>	<u>\$117,000</u>	, 6,000 = <u>\$19.50</u>	X <u>\$19.50</u>
			<u>\$87,750</u>

(c) Perpetual moving average

Date	Purchased	Sold	Balance
1/1			1,000 X \$12 = \$12,000
2/4	2,000 X \$18 = \$36,000		3,000 X \$16 ^a = \$48,000
2/20		2,500 X \$16 = 40,000	500 X \$16 = \$8,000
4/2	3,000 X \$23 = \$69,000		3,500 X \$22 ^b = \$77,000
11/4		2,000 X \$22 = <u>44,000</u>	1,500 X \$22 = \$33,000
		COGS = <u>84,000</u>	

^a 1,000 X \$12 = \$12,000	^b 500 X \$16 = \$ 8,000
<u>2,000 X \$18 = 36,000</u>	<u>3,000 X \$23 = 69,000</u>
<u>3,000</u> <u>\$48,000</u>	<u>3,500</u> <u>\$77,000</u>

(\$48,000 , 3,000 = \$16) (\$77,000 , 3,500 = \$22)

EXERCISE 8-15 (15-20 minutes)

(1) Ending inventory—Specific Identification

Date	No. Units	Unit Cost	Total Cost
December 2	100	\$30	\$3,000
July 20	<u>30</u>	25	<u>750</u>
	<u>130</u>		<u>\$3,750</u>

(2) Ending inventory—FIFO

Date	No. Units	Unit Cost	Total Cost
December 2	100	\$30	\$3,000
September 4	<u>30</u>	28	<u>840</u>
	<u>130</u>		<u>\$3,840</u>

(3) Ending inventory—Weighted Average Cost

Date	Explanation	No. Units	Unit Cost	Total Cost
January 1	Beg. inventory	100	\$20	\$ 2,000
March 15	Purchase	300	24	7,200
July 20	Purchase	300	25	7,500
September 4	Purchase	200	28	5,600
December 2	Purchase	<u>100</u>	30	<u>3,000</u>
		<u>1,000</u>		<u>\$25,300</u>

$$\$25,300 \div 1,000 = \$25.30$$

Ending Inventory—Weighted Average Cost

No. Units	Unit Cost	Total Cost
130	\$25.30	\$3,289

EXERCISE 8-16 (20-25 minutes)

(a) Calculations

1. 2,100 units available for sale – 1,400 units sold = 700 units in the ending inventory.

$$500 @ \$4.58 = \$2,290$$

$$\underline{200 @ 4.60 = 920}$$

$$\underline{700} \qquad \qquad \underline{\$3,210} \text{ Ending inventory at FIFO cost.}$$

2. \$9,240 cost of goods available for sale , 2,100 units available for sale = \$4.40 weighted-average unit cost.
700 units X \$4.40 = \$3,080 Ending inventory at weighted-average cost.

(b) Analysis of methods

FIFO will yield the highest ending inventory and therefore the highest current ratio. FIFO uses the most recent costs to price the ending inventory units. The company has experienced rising purchase prices.

FIFO gives the higher inventory values, a lower cost of goods sold (beginning inventory + purchases – ending inventory) and a higher gross profit.

EXERCISE 8-17 (40-55 minutes)

(a) FIFO – same as periodic in Exercise 8-16 of \$3,210

Moving average cost

Date	Purchased		Sold		Balance		
	No. of units	Unit cost	No. of units	Unit cost	No. of units	Unit cost	Amount
May 1	Beg. Bal.				100	\$4.100	\$ 410.00
6	800	\$4.20			900	4.189	3,770.00
7			300	\$4.189	600	4.189	2,513.40
10			300	4.189	300	4.189	1,256.70
12	400	4.50			700	4.367	3,056.70
15			200	4.367	500	4.367	2,183.50
18	300	4.60			800	4.454	3,563.50
22			400	4.454	400	4.454	1,781.60
25	500	4.58			900	4.524	4,071.60
30			200	4.524	700	4.524	3,166.80

(b)

In the case of the FIFO cost flow formula, it would not matter if the inventory system used were the perpetual (Exercise 8-17) or the periodic (Exercise 8-16) systems, as the results would be the same. This is because the FIFO method assumes that older goods are sold first. This flow of costs is not changed whether a periodic or perpetual system is used.

Results between periodic and perpetual systems would be different in the case where the weighted average and moving average cost flow assumptions are implemented. Under the perpetual inventory system, the average cost is recalculated each time there is a purchase. This is not the case for the periodic system where the average cost is determined at the end of the accounting period. Depending on the frequency of purchases and the range of price changes during the accounting period, the differences could be substantial.

EXERCISE 8-18 (10-15 minutes)

(a)

12/31/14	Inventory	283,250	
	Cost of Goods Sold		283,250

12/31/15	Cost of Goods Sold	283,250	
	Inventory		283,250

12/31/15	Inventory	351,250	
	Cost of Goods Sold		351,250

(b)

12/31/14	Inventory	321,000	
	Cost of Goods Sold		321,000

	Loss on Inventory Due to Decline in NRV	37,750	
	Allowance to Reduce Inventory to NRV		37,750

12/31/15	Cost of Goods Sold	321,000	
	Inventory		321,000

12/31/15	Inventory	385,000	
	Cost of Goods Sold		385,000

	Allowance to Reduce Inventory to NRV	4,000*	
	Recovery of Loss Due to Decline in NRV of Inventory..		4,000

EXERCISE 8-19 (20-25 minutes)

(a)

	<u>February</u>	<u>March</u>	<u>April</u>
Sales	<u>\$29,000</u>	<u>\$35,000</u>	<u>\$40,000</u>
Cost of goods sold			
Inventory, beginning	25,000	25,100	29,000
Purchases	<u>20,000</u>	<u>24,000</u>	<u>26,500</u>
Cost of goods available	45,000	49,100	55,500
Inventory, ending	<u>25,100</u>	<u>29,000</u>	<u>23,000</u>
Cost of goods sold	<u>19,900</u>	<u>20,100</u>	<u>32,500</u>
Gross profit	9,100	14,900	7,500
Gain (loss) due to market fluctuations of inventory*	<u>(7,000)</u>	<u>1,100</u>	<u>700</u>
	<u>\$ 2,100</u>	<u>\$16,000</u>	<u>\$8,200</u>

*	<u>Jan. 31</u>	<u>Feb. 28</u>	<u>Mar. 31</u>	<u>Apr. 30</u>
Inventory at cost	\$25,000	\$25,100	\$29,000	\$23,000
Inventory at the lower of cost or NRV	<u>24,500</u>	<u>17,600</u>	<u>22,600</u>	<u>17,300</u>
Allowance amount needed to reduce inventory to NRV	<u>\$ 500</u>	<u>\$ 7,500</u>	<u>\$ 6,400</u>	<u>\$ 5,700</u>
Gain (loss) due to fluctuations in NRV of inventory**		<u>\$ (7,000)</u>	<u>\$ 1,100</u>	<u>\$ 700</u>

****\$500 – \$7,500 = \$(7,000)**

\$7,500 – \$6,400 = \$1,100

\$6,400 – \$5,700 = \$700

EXERCISE 8-19 (Continued)

(b)

Jan. 31	Loss on Inventory Due to Decline in NRV ..	500	
	 Allowance to Reduce Inventory		
	 to NRV.....		500
Feb. 28	Loss on Inventory Due to Decline in NRV ..	7,000	
	 Allowance to Reduce Inventory		
	 to NRV.....		7,000
Mar. 31	Allowance to Reduce Inventory to NRV	1,100	
	 Recovery of Loss Due to Decline		
	 in NRV of Inventory.....		1,100
Apr. 30	Allowance to Reduce Inventory to NRV	700	
	 Recovery of Loss Due to Decline		
	 in NRV of Inventory.....		700

EXERCISE 8-20 (15-20 minutes)

- (a) Under IFRS, if the unavoidable costs to complete a contract are higher than the benefits expected from receiving the goods under the contract, a loss provision is recognized as an onerous contract. Although ASPE does not have a similar requirement, practice in Canada has been to record the loss and liability as well.
- (b) If the commitment is material in amount, there should be a note to the financial statements stating the nature and extent of the commitment. The note may also disclose the market price of the materials. The excess of market price over contracted price will not be realized as the ultimate purchase cost will be at a maximum of the contract price of \$3.25.
- (c) The drop in the market price of the commitment should be charged to operations in the current year assuming the company will experience an equivalent loss on the receipt of the goods at the contracted price. If so, the following entry would be made:

Loss on Purchase Contracts.....	29,575	
Liability for Onerous Contract.....		29,575

The entry is made because a loss in utility has occurred during the period in which the market decline took place. The account credited in the above entry should be included among the current liabilities on the balance sheet, with appropriate note disclosure indicating the nature and extent of the commitment. This liability indicates the minimum obligation on the commitment contract at the present time.

EXERCISE 8-20 (Continued)

- (d) Assuming the \$29,575 market decline entry was made on December 31, 2014, as indicated in (c), the entry when the materials are received in January 2015 would be:

Raw Materials	118,300	
Liability on Onerous Contracts	29,575	
Accounts Payable		147,875

The inventory is effectively recorded at its current cost of \$2.60/litre.

- (e) Recall from Chapter 1 that financial statements should provide information about the firm's economic resources and claims on those resources. Purchase commitments clearly will result in claims against the resources of the company.

Disclosure of purchase commitments gives users of the financial statements additional information about the expected future cash flows of the firm. It may, for example, allow users to conclude that the firm has reduced its risks by securing a supply of inventory at a preferential price. It might also indicate that the firm has undertaken contracts that will be costly to the firm in the future reducing future earnings.

The ethics of not disclosing this information will be determined based on the reason for non-disclosure. For example, if a company chooses not to disclose this information on the grounds that competitors might use the information to negotiate a lower purchase price of the same raw materials from the same supplier, the company might argue that the disclosure would be disadvantageous to the company and its shareholders.

EXERCISE 8-20 (Continued)

On the other hand, if the company does not disclose the information because management wishes to hide the fact that they entered into an unprofitable contract, this would clearly be unethical.

EXERCISE 8-21 (10-15 minutes)

(a)

Inventory, May 1 (at cost)		\$360,000
Purchases (gross) (at cost)		700,000
Purchase discounts		(12,000)
Freight-in		<u>50,000</u>
Goods available (at cost)		1,098,000
Sales (at selling price)	\$1,200,000	
Sales returns (at selling price)	<u>(70,000)</u>	
Net sales (at selling price)	1,130,000	
Less gross profit (25% of \$1,130,000)	<u>282,500</u>	
Estimated cost of goods sold		<u>847,500</u>
Estimated inventory, May 31 (at cost)		<u><u>\$ 250,500</u></u>

(b) Gross profit as a percent of sales must be calculated:

$$\frac{25\%}{100\% + 25\%} = 20\% \text{ of sales.}$$

Goods available (at cost) from (a)		1,098,000
Net sales (at selling price) from (a)	1,130,000	
Less gross profit (20% of \$1,130,000)	<u>226,000</u>	
Estimated cost of goods sold		<u>904,000</u>
Estimated inventory, May 31 (at cost)		<u><u>\$194,000</u></u>

EXERCISE 8-22 (15-20 minutes)

(a)

Sales	\$ 2,750,000
Gross profit based on pricing 35% of sales	<u>(962,500)</u>
Cost of Goods sold - calculated	1,787,500
Total goods available for sale	<u>2,200,000</u>
Expected ending inventory	<u><u>\$ 412,500</u></u>

(b) The difference between the inventory estimate per the gross profit method and the amount per physical count may be due to several types of errors or omissions in the gross profit calculation:

1. Theft losses (shoplifting or pilferage).
2. Spoilage or breakage above normal.
3. Accounting errors in recording purchases or sales.
4. Error in the beginning inventory.
5. Errors in taking the physical count.
6. Errors in applying planned mark-up percentage.

The first two reasons are not applicable in this instance since the physical amount is higher than the amount estimated with the gross profit method.

EXERCISE 8-23 (20-25 minutes)

$$\text{(a) (1) Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

$$\text{Fiscal 2014} = \frac{863,239 \text{ (see part b)}}{(291,497 + 319,445)/2}$$

$$= 2.83 \text{ times per year}$$

$$\text{Fiscal 2013} = \frac{852,608 \text{ (see part b)}}{(\$319,445 + 302,207)/2}$$

$$= 2.74 \text{ times per year}$$

$$\text{(2) Average days to sell inventory} = \frac{365}{\text{Inventory Turnover Ratio}}$$

$$\text{Fiscal 2014} = \frac{365}{2.83 \text{ times}}$$

$$= 129 \text{ days}$$

$$\text{Fiscal 2013} = \frac{365}{2.74 \text{ times}}$$

$$= 133 \text{ days}$$

EXERCISE 8-23 (Continued)

(b)

		<u>F2014</u>	<u>F2013</u>	<u>Increase</u>	<u>%</u>
Sales	A	\$1,346,758	\$1,331,009	\$ 15,749	1.2%
Gross Margin	C	483,519	478,401		
Cost of sales	B	863,239	852,608		
Percentage Gross Profit	C/A	35.90%	35.94%		
Percentage Mark-up on Cost	C/B	56.01%	56.11%		
 End of year inventory		 \$291,497	 \$319,445	 \$(27,948)	 (8.75)%

- (c) The level of inventory fell 8.75% while sales grew slightly by 1.2%. This is consistent with the improved inventory turnover and days to sell inventory in part (a). Controlling the level of inventory helps a company manage costs.

EXERCISE 8-24

Missing values:

	<u>Year 10</u>	<u>Year 09</u>	<u>Year 08</u>	<u>Year 07</u>
Sales	\$401,244	\$374,307	\$344,759	
Cost of goods sold	306,158	286,350	263,979	
Gross Margin	95,086	87,957	80,780	
Ending inventory	34,511	35,177	34,750	36,750
Gross profit %	23.7%	23.5%	23.4%	
Inventory turnover	8.79 times	8.19 times	7.38 times	
Days sales in inventory	41.52 days	44.57 days	49.46 days	

Formula:

$$\text{Days to sell inventory} = \frac{365}{\text{Inventory Turnover Ratio}}$$

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

- (b) Management has been monitoring and controlling the inventory levels: over the three years, inventory has decreased slightly, while sales have increased 16.4%; gross margins have improved as a result of better inventory management. The turnover and day sales in inventory have both improved.

EXERCISE 8-25 (20-25 minutes)

(a)

	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$32,000	\$ 48,500
Purchases	59,500	112,600
Purchase returns	(2,500)	(3,500)
Freight on purchases	3,600	
Totals		<u>157,600</u>
Add net mark-ups		
Mark-ups	\$10,500	
Mark-up cancellations	<u>(1,500)</u>	
Net mark-ups	<u>\$92,600</u>	<u>9,000</u>
		166,600
Deduct net markdowns		
Markdowns	9,300	
Markdowns cancellations	<u>(2,800)</u>	
Net markdowns		<u>6,500</u>
		160,100
Deduct net sales		
(\$118,500 – \$2,500)		<u>116,000</u>
Ending inventory, at retail		<u>\$ 44,100</u>

$$\text{Cost-to-retail ratio} = \frac{\$92,600}{\$166,600} = 55.6\%$$

$$\text{Ending inventory at cost} = 55.6\% \times \$44,100 = \underline{\underline{\$24,520 \text{ (rounded)}}}$$

***EXERCISE 8-25 (Continued)**

(b)

	<u>At retail</u>	<u>At cost *</u>
Ending inv. - per calculation above	\$ 44,100	\$24,520
Ending inv. - per inventory count	42,000	<u>23,352</u>
Estimated loss due to shrinkage and theft		<u><u>\$ 1,168</u></u>

*** apply cost-to-retail ratio of 55.6%**

(c) The difference between the inventory estimate per retail method and the amount per physical count may be due to: (question only asked for four reasons)

- 1. Theft losses (shoplifting or pilferage).**
- 2. Spoilage or breakage above normal.**
- 3. Differences in cost/retail ratio for purchases during the month, beginning inventory, and ending inventory.**
- 4. Mark-ups on goods available for sale inconsistent between cost of goods sold and ending inventory.**
- 5. A wide variety of merchandise with varying cost/retail ratios.**
- 6. Incorrect reporting of markdowns, additional mark-ups, or cancellations.**
- 7. Errors in taking the physical count.**
- 8. Errors in pricing the physical count.**

EXERCISE 8-26 (10-15 minutes)

- (a) Accounting for inventories of biological assets at the point of harvest are excluded from the measurement requirements of Section 3031, but are included in the expense recognition and disclosure requirements. As such, there is no specific guidance on how such inventory should be measured. Research of companies in this industry indicate most use of lower of cost and net realizable value – which corresponds closely to the primary source of GAAP for similar assets.
- (b) Under IFRS, accounting for biological assets is addressed under IAS 41 (*Agriculture*). Generally, the requirements are to measure such assets at fair value less selling costs.

Where fair value is used, assets are remeasured at each reporting date and these gains/losses are recognized in income.

The fair value model is acceptable for these assets, but not for inventory or property, plant, and equipment because:

- biological assets increase in value as they grow or mature (generally, inventory and property, plant, and equipment decrease in value over time)
- the time lapse between the growth and harvesting period can sometimes be long (e.g., 30 years for trees). Under the traditional historical cost model, no income would be recognized during the growth process—only upon harvest. Under the fair value model, revenue would be recognized during the growth period.

Note that fair value will be determined with reference to the present condition and location of the asset.

Many costs go into the biological transformation process (planting, weeding, etc.). IFRS does not prescribe the treatment of these costs. They may be capitalized or expensed.

EXERCISE 8-26 (Continued)

- (c) Assume that the fair value of the biological asset at the end of this year is \$8 and the opening value was \$5. Here are the journal entries and financial statement impact if capitalized:

Biological Assets	1	
Cash		1
(assume cost of \$1/year)		
Biological Assets*	2	
Unrealized Gain or Loss		2

Record change in fair value from beginning of the year to the end of the year, less the \$1 capitalized during the year:

*supporting calculations

Carrying value, at beginning of year	5
Capitalized during the year	<u>1</u>
Carrying value, before adjustment	6
Fair value, at end of year	<u>8</u>
Change in fair value (income)	2

Financial presentation

Gain on biological asset	2
Expenses	<u>0</u>
Income	2

EXERCISE 8-26 (Continued)

- (d) Assume that the fair value of the biological asset at the end of this year is \$8 and the opening value was \$5. Here are the journal entries and financial statement impact if expensed:

Expense	1	
Cash		1
 Biological Assets**	3	
Unrealized Gain or Loss		3

**supporting calculations

Carrying value, at beginning of year	5
Fair value, at end of year	8
Change in fair value (income)	<u>3</u>

Financial presentation

Gain on biological asset	3
Expenses	<u>1</u>
Income	2

EXERCISE 8-27 (10-15 minutes)

Type of inventory	Primary Guidance under ASPE	Primary Guidance under IFRS
Equipment manufactured	S.3031	IAS 2
Financial derivatives held by a financial institution	Excluded from S.3031 Covered by S.3856 (discussed further in chapter 9)	Excluded from IAS 2 Covered by IAS 32 and IAS 39 (discussed further in chapter 9)
Biological assets at the point of harvest	No specific guidance	IAS 41
Harvested agricultural produce	Excluded from measurement provisions of S.3031 No specific guidance	IAS 2

TIME AND PURPOSE OF PROBLEMS

Problem 8-1 (Time 25–30 minutes)

Purpose—to provide a multipurpose problem with trade discounts, goods in transit, comparative FIFO, and weighted average cost computations, and inventoriable cost identification.

Problem 8-2 (Time 25-35 minutes)

Purpose—to provide the student with a situation involving vendor rebates where the fiscal year end of the supplier is different than that of the buyer. The student must discuss the conceptual basis for accruing the rebate and allocate the amount between the inventory and the cost of goods sold to date. Discussion of ASPE v. IFRS.

Problem 8-3 (Time 30-40 minutes)

Purpose—to provide the student with eight different situations that require analysis to determine their impact on inventory, accounts payable, and net sales. The student is then challenged to determine the effect of the corrections on certain key financial ratios.

Problem 8-4 (Time 30-40 minutes)

Purpose—to provide the student with a problem that requires the restatement of four years' income statements from a non-GAAP to GAAP method of reporting inventory. The student is also required to comment on the effect of the change and trend analysis. Discussion of inventory valued at other than LC& NRV.

Problem 8-5 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to prepare general journal entries to record purchases on a gross and net basis. The student is then asked to comment on his preference between the two methods.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 8-6 (Time 20-25 minutes)

Purpose—to provide a multipurpose problem with purchase discounts which not only has the student calculate ending inventory and cost of goods sold but also prepare a partial income statement comparing FIFO and Weighed average method gross profit rate under declining cost conditions.

Problem 8-7 (Time 30-40 minutes)

Purpose—the student calculates the effect of correction of errors over a two-year period and corrects the current year's income statement and balance sheet, as well as calculates some ratios before and after the corrections.

Problem 8-8 (Time 30-40 minutes)

Purpose—to provide the student with the opportunity to calculate income statement and balance sheet information using FIFO and weighted average methods and make specific recommendations. The student is asked to conclude on the validity of the financial performance measurements used by the company.

Problem 8-9 (Time 20-25 minutes)

Purpose—to provide a problem that requires entries for reducing inventory to lower of cost and market under the periodic inventory system using both the direct and the indirect method.

Problem 8-10 (Time 30-35 minutes)

Purpose—to provide the student with a moderate problem involving gross profit, but with additional instructions concerning the recording of the loss from a fire and the classification of the loss on the income statement. The student must also consider the effect of using an average of the gross profit percentage over several years in presenting an insurance claim.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 8-11 (Time 40-50 minutes)

Purpose—to provide the student with a problem requiring financial statement and note disclosure of inventories, the income disclosure of an inventory market decline, and the treatment of purchase commitments. Discussion of ASPE v. IFRS.

Problem 8-12 (Time 30-35 minutes)

Purpose—to provide the student with an understanding of the lower of cost and net realizable value approach to inventory valuation, using Canadian rules. The problem provides some ambiguity to the situation by changing the catalogue prices near the end of the year. The student is asked to explain the rationale of using the lower of cost and net realizable value rule and explain the application of the rule on key financial ratios.

*Problem 8-13 (Time 20-30 minutes)

Purpose—to provide the student with a problem on the retail inventory method. The problem is relatively straightforward although transfers-in from other departments as well as the proper treatment for normal spoilage complicates the problem. Comments concerning the possible cause of a discrepancy between estimated and inventory count amounts are required. A good problem that summarizes the essentials of the retail inventory method.

Problem 8-14 (Time 20-30 minutes)

Purpose—to provide a problem where the student must calculate the inventory using a FIFO, and moving average cost formula. These inventory value determinations must be made under two differing assumptions: (1) perpetual inventory records are kept in units only and (2) perpetual records are kept in dollars. A partial statement of income to gross profit must also be prepared to calculate and explain the effect of each method on the gross profit percentage.

SOLUTIONS TO PROBLEMS

PROBLEM 8-1

- (a) $\$175,000 - (\$175,000 \times .20) = \$140,000$;
 $\$140,000 - (\$140,000 \times .10) = \$126,000$, cost of goods purchased
- (b) $\$1,100,000 + \$69,000 = \$1,169,000$.

The \$69,000 of goods in transit on which title had passed on December 24 (f.o.b. shipping point) should be added to 12/31/14 inventory.

The \$29,000 of goods shipped (f.o.b. shipping point) on January 3, 2015, should remain part of the 12/31/14 inventory and has been correctly included in the amount of \$1,100,000.

The \$77,000 inventory is properly excluded from the 12/31/14 inventory since title passed after year-end.

The \$83,500 inventory is properly excluded since it is on consignment and title remains with the consignor until Assayer sells to the customer.

(c)		
<u>FIFO inventory cost:</u>	1,000 units at \$24	\$ 24,000
	1,000 units at \$23	<u>23,000</u>
	Total	<u>\$ 47,000</u>
<u>Weighted-Average cost:</u>		
	1,500 at \$21	\$ 31,500
	2,000 at \$22	44,000
	3,500 at \$23	80,500
	<u>1,000 at \$24</u>	<u>24,000</u>
Totals	<u>8,000</u>	<u>\$180,000</u>

$$\$180,000 \div 8,000 = \$22.50$$

Ending inventory (2,000 X \$22.50) is \$45,000.

PROBLEM 8-1 (Continued)

(d) The inventoriable costs for 2014 are:

Merchandise purchased		\$909,400
Add: Freight-in		<u>22,000</u>
		931,400
Deduct: Purchase returns	\$16,500	
Purchase discounts	<u>6,800</u>	<u>23,300</u>
Inventoriable cost		<u>\$908,100</u>

Freight out is a period cost.

Storage costs are generally regarded as period costs also.

Storage costs may be included in the cost of inventory if the product must be held for periods of time as part of the production process such as in wine production. Interest costs incurred on regular vendor accounts for late payment do not meet the requirements for capitalization.

(e) Under IFRS, the inventoriable costs for 2014 include any interest directly attributable to the acquisition of inventory, therefore the inventoriable costs are:

Costs per (d) above	908,100
Interest costs	<u>8,700</u>
Total	<u>916,800</u>

IFRS will result in a higher value for inventory on the balance sheet. On one hand, if the need to finance purchases is necessary, as it is in many business models; then the interest costs are a required component of the cost of purchasing inventory and should be included. On the other hand, the inclusion of interest could be seen as rewarding companies whose executives are poor managers of cash flow as the costs of interest are capitalized, improving both the balance sheet and income statement, rather than being expensed immediately.

PROBLEM 8-2

If Quass follows the reporting requirements under private entity GAAP:

- (a) Quass should recognize the cash rebates expected to be earned by December 31, 2014 as a reduction of costs on the scooter units purchased by September 30, 2014. The rebate receivable meets the definition of and recognition criteria for an asset and therefore should be accrued at September 30, 2014. The amount of the rebate can be reasonably estimated and the receipt of the rebate after the December 31, 2014 year-end is probable. The amount recognized is split between Inventory on the balance sheet and Cost of Goods Sold on the income statement in proportion to the costs of the 190 units purchased from Ionone between February 1, 2014 and September 30, 2014.**
- (b) Had the rebate been discretionary, Quass would not have a reasonable basis to determine that a rebate would in fact be collected and so they would not accrue the reduction of the purchase price until collected.**
- (c) When deciding on the probability of the realization of the accrued rebate, Quass should seriously look at such factors as the effect of weather and sales trends. Decreased levels of sales would in turn dictate reduced purchases through the fall and winter months. Quass should look at trends in the industry and the performance of competitors with regards to sales levels varying during the seasons. Quass should also consider trends in buying by customers who might be affected by such factors as the cost of gasoline and other modes of transportation.**

PROBLEM 8-2 (Continued)

- (d) The calculation of the rebate to accrue at September 30, 2014 follows:

	Expected Total Units	Rebate Base in Units	Excess Units	Dollar Rebate Amount	Total Dollar Rebate
Level 1	250	150	100	\$75	\$7,500
Level 2	250	175	75	30	2,250
Total					<u>\$9,750</u>
Per Unit (250 Units)					<u>\$39</u>
Sold (155 units)					6,045
Unsold (35 units)					1,365

- (e)
- | | | |
|-------------------------------------|-------|-------|
| Rebate Receivable (190 X \$39)..... | 7,410 | |
| Cost of Goods Sold | | 6,045 |
| Inventory | | 1,365 |

- (f) The response remains unchanged under the reporting requirements of IFRS.

PROBLEM 8-3

**Ilanthe Limited
Schedule of Adjustments
December 31, 2014**

	Inventory	Accounts Payable	Net Sales
Initial amounts	<u>\$1,720,000</u>	<u>\$1,300,000</u>	<u>\$8,550,000</u>
Adjustments:			
1.	NONE	NONE	(57,000)
2.	51,000	51,000	NONE
3.	38,000	NONE	NONE
4.	38,000	NONE	(48,000)
5.	21,000	NONE	NONE
6.	27,000	NONE	NONE
7.	NONE	56,000	NONE
8.	<u>3,500</u>	<u>7,000</u>	<u>NONE</u>
Total adjustments	<u>178,500</u>	<u>114,000</u>	<u>(105,000)</u>
Adjusted amounts	<u>\$1,898,500</u>	<u>\$1,414,000</u>	<u>\$8,445,000</u>

1. The \$37,000 of tools on the loading dock was properly included in the physical count. The sale should not be recorded until the goods are picked up by the common carrier. Therefore, no adjustment is made to inventory, but sales must be reduced by the \$57,000 billing price.

PROBLEM 8-3 (Continued)

- 2. The \$51,000 of goods in transit from a vendor to lanthe was shipped f.o.b. shipping point on 12/29/14. Title passes to the buyer as soon as goods are delivered to the common carrier when sold f.o.b. shipping point. Therefore, these goods are properly includable in lanthe's inventory and accounts payable at 12/31/14. Both inventory and accounts payable must be increased by \$51,000.**
- 3. The work in process inventory sent to an outside processor islanthe's property and should be included in ending inventory. Since this inventory was not in the plant at the time of the physical count, the inventory column must be increased by \$38,000.**
- 4. The tools costing \$38,000 were recorded as sales (\$48,000) in 2014. However, these items were returned by customers on December 31, so 2014 net sales should be reduced by the \$48,000 return. Also, \$38,000 has to be added to the inventory column since these goods were not included in the physical count.**
- 5. The \$21,000 of lanthe's tools shipped to a customer f.o.b. destination are still owned by lanthe while in transit because title does not pass on these goods until they are received by the buyer. Therefore, \$21,000 must be added to the inventory column. No adjustment is necessary in the sales column because the sale was properly recorded in 2015 when the customer received the goods.**
- 6. The goods received from a vendor at 5:00 p.m. on 12/31/14 should be included in the ending inventory, but were not included in the physical count. Therefore, \$27,000 must be added to the inventory column. No adjustment is made to accounts payable, since the invoice was included in 12/31/14 accounts payable.**

PROBLEM 8-3 (Continued)

- 7. The \$56,000 of goods received on 12/26/14 was properly included in the physical count of inventory; \$56,000 must be added to accounts payable since the invoice was not included in the 12/31/14 accounts payable balance.**
 - 8. Since one-half of the freight-in cost (\$7,000) pertains to merchandise properly included in inventory as of 12/31/14 \$3,500 should be added to the inventory column. The remaining \$3,500 debit should be reflected in cost of goods sold. The full \$7,000 must be added to accounts payable since the liability was not recorded. Note that the freight charges could also be recorded as freight-in and not necessarily capitalized in ending inventory under the periodic presentation of Cost of Goods Sold, so an answer of none in the inventory column would also be acceptable.**
- (b) 1. Working capital deteriorated by \$40,500 (Inventory \$178,500 – Accounts Receivable from Sales \$105,000 – Accounts Payable \$114,000)**
- 2. Current ratio has deteriorated:**
Before the correction the current ratio was:
$$\$2,680,000 / \$1,550,000 = 1.7$$
After correction the current ratio was:
$$(\$2,680,000 + \$178,500 - \$105,000) /$$
$$(\$1,550,000 + \$114,000) = 1.65$$
- 3. Gross profit deteriorated as net sales decreased**
- 4. Profit margin deteriorated as net sales decreased.**

PROBLEM 8-4

- (a) Inventory is generally reported at lower of cost and net realizable value. This works well for most industries. However, there are a few industries where reporting inventories at net realizable value – that is the amount that will be collected in the future – even if it above cost, is more appropriate. In such cases, the following criteria are necessary:**

**The sale is assured or there is an active market for the product.
The disposal costs are estimable.**

Some examples include: Industries where there is a controlled market such as raw metals or other minerals; agricultural produce or forestry products that have been harvested; additionally, it would be also be appropriate for the minor marketable by-products where cost would be too difficult to obtain.

These circumstances do not appear to exist for Halm. Halm's procedure for valuing inventories violates the historical cost principle. As well, the application of the lower of cost or net realizable value rule has also been ignored. The financial statements have therefore not been prepared in accordance with GAAP.

PROBLEM 8-4 (Continued)

(b)

Effect on Ending Inventory (\$'000):

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Inventory - lower of Cost & NRV	\$ 150	\$147	\$170	\$ 175
Inventory at NRV	<u>160</u>	<u>\$160</u>	<u>\$170</u>	<u>189</u>
Increase (Reduction)	(10)	(13)	0	(14)
Effect on Beginning Inventory	<u>0</u>	<u>(10)</u>	<u>(13)</u>	<u>0</u>
Effect on Cost of Goods Sold	10	3	(13)	14
Current Cost of Goods Sold	<u>560</u>	<u>590</u>	<u>630</u>	<u>650</u>
Revised Cost of Goods Sold	<u>\$ 570</u>	<u>\$ 593</u>	<u>\$617</u>	<u>\$ 664</u>

Revised Income Statements (\$'000)

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Sales	\$ 850	\$ 880	\$950	\$ 990
Cost of Goods Sold	<u>570</u>	<u>593</u>	<u>617</u>	<u>664</u>
Gross Profit	280	287	333	326
Operating Expenses	<u>190</u>	<u>180</u>	<u>200</u>	<u>210</u>
Income Before Taxes	<u>\$ 90</u>	<u>\$ 107</u>	<u>\$ 133</u>	<u>\$ 116</u>

(c)

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Income as previously reported	\$ 100	\$ 110	\$120	\$ 130
Revised income	<u>90</u>	<u>107</u>	<u>133</u>	<u>116</u>
Net change	<u>(\$ 10)</u>	<u>(\$ 3)</u>	<u>\$13</u>	<u>(\$ 14)</u>

PROBLEM 8-4 (Continued)

**(d) Cumulative effect on balance
of Retained Earnings (\$'000)**

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Prior years' income	\$0	(\$10)	(\$13)	\$(0)
Current year's income	<u>(10)</u>	<u>(3)</u>	<u>13</u>	<u>(14)</u>
Cumulative effect on balance	<u>(\$10)</u>	<u>(\$13)</u>	<u>\$ (0)</u>	<u>(\$14)</u>

- (e)** From the tables above, we observe that in the three years, where there appeared to be an increasing cost trend, (all years except 2010), the effect of using the net realizable value overstated income, since ending inventories were overstated. There is also a reduction in the cumulative balance of retained earnings in all years except 2012. This effect on ending inventory is somewhat reduced by the offsetting effect of the costing method on the opening inventory in the immediately following year.

The income statements as originally issued show a consistent increase in income before taxes from 2010 to 2013. This trend gives the appearance of a low risk business from the perspective of a potential investor. When one looks at the revised income statements, one can see the dramatic ups and downs, which impacts directly the stability of profitability. This would be cause for concern to an investor or creditor.

PROBLEM 8-5

(a) 1.	8/10		
	Purchases	12,000	
	Accounts Payable		12,000
	8/13		
	Accounts Payable	1,200	
	Purchase Returns and Allowances		1,200
	8/15		
	Purchases	16,000	
	Accounts Payable		16,000
	8/25		
	Purchases	20,000	
	Accounts Payable		20,000
	8/28		
	Accounts Payable	16,000	
	Cash		16,000

- 2. Purchases—addition in cost of goods sold section of income statement.**

Purchase returns and allowances—deduction from purchases in cost of goods sold section of the income statement.

Accounts payable—current liability, in the liabilities section of the balance sheet.

PROBLEM 8-5 (Continued)

(b) 1.	8/10		
	Purchases	11,760	
	Accounts Payable		11,760
	(\$12,000 X .98)		
	8/13		
	Accounts Payable	1,176	
	Purchase Returns and Allowances		1,176
	(\$1,200 X .98)		
	8/15		
	Purchases	15,840	
	Accounts Payable		15,840
	(\$16,000 X .99)		
	8/25		
	Purchases	19,600	
	Accounts Payable		19,600
	(\$20,000 X .98)		
	8/28		
	Accounts Payable	15,840	
	Purchase Discounts Lost	160	
	Cash		16,000
2.	8/31		
	Purchase Discounts Lost	216	
	Accounts Payable		
	(.02 X [\$12,000 – \$1,200])		216

PROBLEM 8-5 (Continued)

- 3. Same as part (a) 2. except:**
Purchase Discounts Lost—treat as financial expense in income statement in the Other Expenses and Losses section.
- (c) The method that results in the higher gross profit ratio is the net method, assuming some discounts are lost during the year, since the purchase discounts lost are not part of cost of goods sold, (as is the case for purchase discounts) but are classified as financial expense.**
- (d) The second method is better theoretically because it results in the inventory being carried net of purchase discounts available, and purchase discounts not taken are shown as a financing expense. The first method is normally used, however, for practical reasons.**

PROBLEM 8-6

(a) FIFO Ending Inventory 12/31/14

76 @ \$10.89*	=	\$ 827.64
24 @ \$11.88**	=	<u>285.12</u>
		<u><u>\$1,112.76</u></u>

*(\$11.00 X .99)

**(\$12.00 X .99)

(b)

Weighted average cost per unit	$\frac{\$7,391.66^*}{475}$	=	<u><u>\$15.56</u></u>
Ending inventory 100 X \$15.56 =			<u><u>\$1,556.00</u></u>

* 160 @ \$20.00 =	\$ 3,200.00
65 @ \$15.84 =	1,029.60
90 @ \$14.85 =	1,336.50
84 @ \$11.88 =	997.92
76 @ \$10.89 =	<u>827.64</u>
Total goods available	<u><u>\$ 7,391.66</u></u>

PROBLEM 8-6 (Continued)

(c)

	<u>FIFO</u>
Sales	\$ 8,343.75 *
Cost of goods sold	
Beginning inventory	\$ 2,000.00
Purchases (7,391.66 – 2,000)	5,391.66
Less: ending inventory	<u>(1,112.76) **</u> 6,278.90
Gross profit	<u>\$ 2,064.85</u>
Gross profit rate	24.7%
	<u>Weighted Average</u>
Sales	\$ 8,343.75
Cost of goods sold	
Beginning inventory	\$ 2,000.00
Purchases	5,391.66
Less: ending inventory	<u>(1,556.00)**</u> 5,835.66
Gross profit	<u>\$ 2,508.09</u>
Gross profit rate	30.1%

* Sales 375 units @ \$22.25 = \$8,343.75

** From parts (a) and (b)

The difference in the gross profit of \$443.24 (or 5.3% of sales) is due entirely to the \$443.24 difference in the cost of goods sold between the two methods.

The lower COGS (higher gross profit) in the weighted average method is due to the declining prices being averaged in the cost of the goods sold, some from the high costs at the first of the year, some from the mid-level prices from mid-year, and some from the very lowest costs at the end of the year.

Under the FIFO basis, all the costs included in COGS are the oldest and highest costs—there are none from the lowest costs near year end.

PROBLEM 8-6 (Continued)

- (d) Regardless of the change in selling price, the inventory cost at year-end should represent a fairly current cost. This would tend to support a FIFO inventory cost valuation rather than a weighted average cost. Because the selling prices are dropping along with the cost from the supplier, it is important to determine the lower of cost and net realizable value of the inventory at year-end. Although it appears that the selling price may still be above cost (average selling price of \$22.25 vs. average cost of \$15.56 for the year) the costs to sell this product need to be determined in order to calculate its NRV. If NRV is above the cost used for financial reporting purposes, then the inventory cost can be used for balance sheet purposes. If NRV is below “cost”, then NRV will be used. In general, it appears that a FIFO inventory formula provides a more faithful representation of inventory cost in the circumstance of rapidly changing downward costs.**

PROBLEM 8-7

- (a) **Based on the unadjusted balance sheet of KwikMart Ltd. at December 31, 2014:**

Working capital:

Current assets - current liabilities

\$5,000+\$39,000+\$79,000 -\$75,000

= \$48,000

Current ratio:

Current assets divided current liabilities

(\$5,000+\$39,000+\$79,000) / \$75,000

= 1.64 to 1

Debt to equity ratio:

Total liabilities divided by total equity

(\$75,000+\$62,000) / (\$60,000+\$51,000)

= 1.23 to 1

PROBLEM 8-7 (Continued)

(b)

Net income fiscal year 2014 (unadjusted)		\$ 53,000
Add:		
Overstatement of ending inventory 2013	\$ 13,000	
Understatement of purchases 2013	1,700	
Understatement of inventory 2014	17,000	
Prepaid expenses omitted 2014	750	
Remove dividend expense 2014	<u>500</u>	32,950
Less:		
Accrued revenues 2013 omitted	(2,500)	
Prepaid expenses omitted 2013	(2,400)	
Omission of salary accrual 2014	(1,800)	
Omission of unearned income 2014	<u>(2,300)</u>	(9,000)
Corrected net income fiscal year 2014		<u>\$ 76,950</u>

(c) Correction of Retained Earnings balance at December 31, 2014

Retained earnings (unadjusted)		\$ 51,000
Correction of opening balance errors:		
Overstatement of ending inventory 2013	\$(13,000)	
Understatement of purchases 2013	(1,700)	
Prepaid expenses omitted 2013	2,400	
Accrued revenues 2013 omitted	<u>2,500</u>	(9,800)
Add corrections in current year income	32,950	
	<u>(9,000)</u>	23,950
Less dividends		(500)
Revised ending balance		<u>\$ 64,650</u>

PROBLEM 8-7 (Continued)

KwikMart Ltd. Balance Sheet December 31, 2014

Assets			
	<u>Unadj.</u>	<u>Adj.</u>	<u>Revised</u>
Cash	\$ 5,000		\$ 5,000
Accounts and notes receivable	39,000		39,000
Inventory	79,000	17,000	96,000
Prepaid expense		750	750
Property, plant and equipment (net)	<u>125,000</u>		<u>125,000</u>
	<u>\$ 248,000</u>		<u>\$ 265,750</u>

Liabilities and Shareholders' Equity

Accounts and notes payable	\$ 75,000	(20,000)	\$ 55,000
Accrued liabilities		1,800	1,800
Unearned income		2,300	2,300
Long-term accounts payable		20,000	20,000
Long-term debt	62,000		62,000
Common shares	60,000		60,000
Retained earnings	<u>51,000</u>	13,650*	<u>64,650</u>
	<u>\$ 248,000</u>		<u>\$ 265,750</u>

* Amount can be derived from the accounting equation

PROBLEM 8-7 (Continued)

(d)

Working capital:

Current assets - current liabilities

$$\begin{aligned} & \$5,000 + \$39,000 + \$96,000 + \$750 - \$55,000 - \$1,800 - \$2,300 \\ & = \$81,650 \end{aligned}$$

Current ratio:

Current assets divided current liabilities

$$\begin{aligned} & (\$5,000 + \$39,000 + \$96,000 + \$750) / (\$55,000 + \$1,800 + \$2,300) \\ & = 2.38 \text{ to } 1 \end{aligned}$$

Debt to equity ratio:

Total liabilities divided by total equity

$$\begin{aligned} & (\$55,000 + \$1,800 + \$2,300 + \$20,000 + \$62,000) / (\$60,000 + \$64,650) \\ & = 1.13 \text{ to } 1 \end{aligned}$$

All three ratios have improved, especially the current ratio and the amount of working capital reported, and these are related. Between corrections that increased current assets and decreased current liabilities, a net amount of \$33,650 was added to the unadjusted amount of working capital. This could only increase the current ratio and it did – a \$17,750 increase in current assets and a \$15,900 decrease in current liabilities. Because the amount of working capital was only \$48,000 before correction, the addition of \$33,650 has a significant effect.

PROBLEM 8-7 (Continued)

Many adjustments were required to determine the corrected debt to equity ratio because errors at the end of 2013 as well as at the end of 2014 affect the equity (through net income and then retained earnings). As you can see from the above analysis, some of the errors have self-corrected by the end of the 2nd year, such as the inventory error at the end of 2013. It affected both 2013 and 2014 income, but by the end of 2014, the retained earnings is correct relative to that error. Note that the ending inventory error at December 31, 2014 affects 2014 net income reported and would affect 2015's if not corrected now.

The debt/equity ratio has been reduced from 1.23 to 1.13. (Whether the revised ratio is “better” than the adjusted ratio really depends on the industry, the company's desired capital structure and other factors.) The reduction is due to a significant increase in the denominator (equity) of \$13,650 with only a small adjustment to the numerator (debt) of +\$4,100.

PROBLEM 8-8

(a) (amounts in thousands)

<u>Statement of income</u>	<u>FIFO</u>		<u>Weighted Average</u>	
Sales	\$ 284		\$284	
Cost of goods sold				
Purchases	\$247		\$247	
Less: ending inventory	64	183	52	195
Gross profit	101		89	
Other expenses	40		40	
Net income	<u>\$ 61</u>		<u>\$ 49</u>	

<u>Balance Sheet</u>	<u>FIFO</u>		<u>Weighted Average</u>	
Current assets, excluding inventory	\$ 10		\$ 10	
Inventory	64		52	
Total current assets	74		62	
Other assets	107		107	
Total assets	<u>\$ 181</u>		<u>\$ 169</u>	
Current liabilities	\$ 30		\$ 30	
Long-term bank loan	50		50	
Total liabilities	80		80	
Astro Languet, Capital	101*		89**	
Total liabilities and owners' equity	<u>\$ 181</u>		<u>\$ 169</u>	

*\$40 + \$61 = \$101

**\$40 + \$49 = \$89

Calculations of ending inventory:

FIFO: 4,000 X \$16 = \$64,000

Weighted average: 4,000 X (\$247÷19 = \$13) = \$52,000

PROBLEM 8-8 (Continued)

(b), (c)

Given these calculations, the resulting ratios can be computed:

Current ratio:

FIFO: $\$74 / \$30 = 2.47$

W.A.: $\$62 / \$30 = 2.07$

Debt to total assets ratio:

FIFO: $\$80 / \$181 = 44.2\%$

W.A.: $\$80 / \$169 = 47.3\%$

Rate of return on total assets:

FIFO: $\$61 / \$181 = 33.7\%$

W.A.: $\$49 / \$169 = 29.0\%$

The consequences of these ratios in terms of the constraints and agreements are as follows:

- 1. Current ratio is satisfactory (2:1 or greater) for FIFO (2.47) and weighted-average (2.07).**
- 2. Debt to total assets ratio is satisfactory (not greater than 45%) for FIFO (44.2%) but not for weighted-average (47.3%). Consequently, to avoid the possibility of the bank putting the company into a state of bankruptcy, only FIFO would be acceptable.**
- 3. Rate of return on total assets satisfies the owner's criteria for success (30% or more) under the use of FIFO (33.7%) but is not satisfactory under weighted-average (29%).**

PROBLEM 8-8 (Continued)

4. To use FIFO would result in the employee receiving 8 extra days off with pay in 2015 (rate of return on total assets of $33\% - 25\% = 8\%$ in full points). Weighted-average would provide 4 days ($29\% - 25\%$).
- (d) Recommendation: FIFO. FIFO satisfies suppliers, the bank, and the owner, in terms of ratio requirements. It provides more days off for the employee (which has a cost) but this is more acceptable than higher prices from suppliers or possible bankruptcy forced by the bank.
- (e) The underlying economic performance appears to be different if one were to use the ratio results exclusively. But the economic performance is the same, regardless of which accounting methods are used.

For the regular suppliers, the minimum ratio is met under either method, so either method could be chosen. However, if Astro uses weighted-average, the bank's requirement to meet a debt-to-total-assets ratio of less than 45% will not be met and the bank will be able to demand repayment of the debt. Therefore Astro would clearly prefer to use the FIFO method.

Finally, if Astro chooses the weighted average method, he will not achieve the expected rate of return of at least 30%, but it will reduce the number of additional days off that Astro will need to give to his employee.

Clearly preparers and users of financial information must appreciate the impact of accounting method selection on financial statement amounts and resulting ratios.

PROBLEM 8-9

(a)

12/31/13 (Periodic—Direct Method)

To close beginning inventory:

Cost of Goods Sold 720,000

Inventory..... 720,000

To record ending inventory:

Inventory 918,400

Cost of Goods Sold..... 918,400

12/31/14

To close beginning inventory:

Cost of Goods Sold 918,400

Inventory..... 918,400

To record ending inventory:

Inventory 880,000

Cost of Goods Sold..... 880,000

(b)

12/31/13 (Periodic—Allowance Method)

To close beginning inventory:

Cost of Goods Sold 720,000

Inventory..... 720,000

PROBLEM 8-9 (Continued)

To record ending inventory:

Inventory	980,000	
Cost of Goods Sold.....		980,000

To write down inventory to net realizable value:

Loss on Inventory Due to Decline in NRV	61,600	
Allowance to Reduce Inventory to NRV		61,600
(\$980,000-\$918,400)		

12/31/14

To close beginning inventory:

Cost of Goods Sold	980,000	
Inventory.....		980,000

To record ending inventory:

Inventory	950,000	
Cost of Goods Sold.....		950,000

To write down inventory to net realizable value:

Loss on Inventory Due to Decline in NRV	8,400	
Allowance to Reduce Inventory to NRV		8,400
[(950,000 – 880,000) – 61,600]		

PROBLEM 8-10

(a)

Beginning inventory		\$440,000
Purchases		<u>850,000</u>
		1,290,000
Purchase returns		<u>(55,000)</u>
Total goods available		1,235,000
Sales	\$1,350,000	
Sales returns	<u>(50,000)</u>	
Net sales	1,300,000	
Less gross profit (40% X \$1,300,000)	<u>(520,000)</u>	<u>780,000</u>
Estimated ending inventory (unadjusted for damage)		455,000
Less goods on hand—undamaged (at cost)		
\$42,000 X (1 – 40%)		(25,200)
Less goods on hand—damaged (at net realizable value)		<u>(10,600)</u>
Loss of inventory due to fire		<u><u>\$419,200</u></u>

(b)

Damaged Inventory.....	10,600	
Purchases Returns	55,000	
Cost of Goods Sold	780,000	
Loss From Fire.....	419,200	
Purchases		850,000
Inventory*		414,800

* \$440,000 – 25,200

(c)

Fire and theft are ordinary business risks that most companies insure against. Insurance expense is recognized as an ordinary operating cost. If a company doesn't have insurance or there is a co-pay clause or a deductible amount, the cost to them of this ordinary business risk is the loss from the fire (if uninsured) or the deductible amount, or the co-pay clause amount (if insured).

PROBLEM 8-10 (Continued)

- (d) The gross profit percentages experienced over the past five years would be particularly relevant if the company was looking for recovery from an insurance company. In that case, they would likely be used by the insurance company as a reasonableness check against other financial information provided in support of the insurance claim, such as the year-end financial statements, for example. The insurer could argue that going back as far as five years might not be relevant in the calculation of the current year loss. This would be the case particularly if the insurer can reduce the claim by applying a lower (more recent) gross profit percentage than the 40% average used in the calculation above.

As the situation assumes there is no insurance coverage, the only difference the range of gross profit percentages makes is how the cost of merchandise sold and lost is allocated between cost of goods sold and the loss from the fire.

PROBLEM 8-11

- (a) The inventory section of Sube's Statement of Financial Position as of September 30, 2014, including required footnotes, is presented below. Also presented below is the inventory section supporting calculations.

Current assets

Inventories (Note 1)

Finished goods (Note 2)	\$721,000	
Work-in-process	105,500	
Raw materials	260,500	
Factory supplies	<u>64,800</u>	
Total inventories		<u><u>\$1,151,800</u></u>

Note 1. Lower of cost (first-in, first-out) or net realizable value is applied on a major category basis for finished goods, and on a total inventory basis for work-in-process, raw materials, and factory supplies.

Note 2. Seventy-five percent of bar end shifters finished goods inventory in the amount of \$159,000 ($\$212,000 \times .75$) is pledged as collateral for a bank loan, and one-half of the head tube shifters finished goods is held by catalogue outlets on consignment.

PROBLEM 8-11 (Continued)

Supporting Calculations

	<u>Finished Goods</u>	<u>Work-in- Process</u>	<u>Raw Materials</u>	<u>Factory Supplies</u>
Down tube shifters at NRV	\$264,000			
Bar end shifters at cost	212,000			
Head tube shifters at cost	245,000			
Work-in-process at NRV		\$105,500		
Deraileurs at NRV			\$125,000 ¹	
Remaining items at NRV			135,500	
Supplies at cost				\$64,800 ²
Totals	<u>\$721,000</u>	<u>\$105,500</u>	<u>\$260,500</u>	<u>\$64,800</u>

¹\$150,000 , 1.2 = \$125,000.

²\$69,000 – \$4,200 = \$64,800.

- (b) The decline in the net realizable value of inventory below cost may be reported using one or two alternate methods, the direct write-down of inventory or the establishment of an allowance account. The decline in the net realizable value of inventory may be reflected in Sube's Income Statement as a separate loss item for the fiscal year ended September 30, 2014. The loss amount may also be written off directly, increasing the cost of goods sold on Sube's Income Statement. The loss must be reported in continuing operations.

PROBLEM 8-11 (Continued)

- (c) If the contract price is greater than the current market price and an equivalent loss is expected from the receipt and subsequent sale of the contracted items, a loss on purchase contracts amounting to the difference between the contracted price and the current market price should be recognized on the Income Statement in the period during which the price decline takes place. Also, an accrued liability on purchase contracts should be recognized on the statement of financial position.**
- (d) Under IFRS, if the unavoidable costs to complete a contract are higher than the benefits expected from receiving the goods under the contract, a loss provision is recognized as an onerous contract.**
- (e) The accounting treatment is consistent under ASPE and IFRS.**

Under IFRS, if the unavoidable costs to complete a contract are higher than the benefits expected from receiving the goods under the contract, an onerous contract is recognized as a loss. Although ASPE does not have a similar requirement, practice in Canada has been to record the loss and liability as well.

PROBLEM 8-12

(a) LC&NRV

Type	Qty.	Cost per unit	Total Cost	Estim. selling price	Estim. selling expense	NRV per unit	Total NRV	LC and NRV
A	15	\$410	\$6,150	\$575	\$40	\$535	8,025	\$6,150
B	117	450	52,650	650	65	585	68,445	52,650
C	113	830	93,790	780	95	685	77,405	77,405
D	110	960	<u>105,600</u>	1,420	130	1,290	<u>141,900</u>	<u>105,600</u>
			<u>\$258,190</u>				<u>295,775</u>	<u>\$241,805</u>

Applied on an individual basis, LC and NRV, the inventory will be booked at \$241,805.

- (b) The use of the lower of cost and market rule (market defined as net realizable value under ASPE and IFRS) is based on both the matching concept and the concept of conservatism. The matching concept applies because the application of the LC&NRV rule allows for the recognition of any impairment or decline in the utility (value) of inventory as a loss in the period in which the impairment or decline takes place.
- (c) If the LC&NRV rule was applied on a total basis, inventory would be valued at \$258,190, which is higher than the LC&NRV amount determined in part (a).

***PROBLEM 8-13**

(a)

(1)

	<u>Cost</u>	<u>Retail</u>
Inventory (beginning)	\$ 18,000	\$ 28,000
Purchases	110,000	147,000
Freight-in	6,000	
Purchase allowances	(2,200)	
Purchase returns	(2,700)	(3,500)
Transfers-in from suburban branch	9,200	<u>13,000</u>
		184,500
Mark-ups (net)	<u> </u>	<u>8,000</u>
	<u>\$138,300</u>	192,500
Markdowns (net)		(4,000)
Inventory losses - breakage		(400)
Sales		\$(121,000)
Sales returns		<u>2,400</u>
Net sales		<u>(118,600)</u>
Ending inventory at retail		<u>\$ 69,500</u>

$$\text{Cost-to-retail ratio} = \frac{\$138,300}{\$192,500} = 71.84\%$$

(2) Ending inventory at lower of average cost and market

(71.84% of \$69,500) \$ 49,929 (rounded)

***PROBLEM 8-13 (Continued)**

- (b) The difference between the inventory estimate per retail method and the amount per physical count may be due to:**
- 1. Theft losses (shoplifting or pilferage).**
 - 2. Spoilage or breakage above normal.**
 - 3. Differences in cost/retail ratio for purchases during the month, beginning inventory, and ending inventory.**
 - 4. Mark-ups on goods available for sale inconsistent between cost of goods sold and ending inventory.**
 - 5. A wide variety of merchandise with varying cost/retail ratios.**
 - 6. Incorrect reporting of markdowns, additional mark-ups, or cancellations.**
 - 7. Errors in taking the physical count.**
 - 8. Errors in pricing the physical count.**

PROBLEM 8-14

- (a) Assuming costs are not calculated for each withdrawal (units available, 6,600, minus units issued, 4,700, equals ending inventory at 1,900 units):

1. First-in, first-out.

<u>Date of Invoice</u>	<u>No. Units</u>	<u>Unit Cost</u>	<u>Total Cost</u>
May 23	400	\$3.40	\$1,360
May 28	1,500	\$3.60	<u>5,400</u>
			<u>\$6,760</u>

2. Weighted Average cost.

Cost of goods available:

<u>Date of Invoice</u>	<u>No. Units</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Beg. Bal.	1,150	\$2.90	\$ 3,335
May 2	1,050	3.00	3,150
May 10	600	3.20	1,920
May 18	1,000	3.30	3,300
May 23	1,300	3.40	4,420
May 28	<u>1,500</u>	3.60	<u>5,400</u>
Total Available	<u>6,600</u>		<u>\$21,525</u>

Average cost per unit = $\$21,525 \div 6,600 = \$ 3.26$

Cost of inventory May 31 = $1,900 \times \$3.26 = \underline{\underline{\$6,194 \text{ (rounded)}}}$

PROBLEM 8-14 (Continued)

(b)

	FIFO
Sales	\$ 34,075*
Cost of goods sold	
Beginning inventory	\$ 3,335
Purchases	18,190
Less: ending inventory (from a)	(6,760)
	14,765
Gross profit	\$ 19,310

Gross profit rate	56.7%

	Weighted Average
Sales	\$ 34,075
Cost of goods sold	
Beginning inventory	\$ 3,335
Purchases	18,190
Less: ending inventory (from a)	(6,194)
	15,331
Gross profit	\$ 18,744
Gross profit rate	55.0%

* Sales of 4,700 units at average selling price of \$7.25 = \$34,075

PROBLEM 8-14 (Continued)

(b) (continued)

The gross profit rate is affected by the choice of cost flow method, as there is a consistent increasing trend in the unit cost. FIFO has the highest gross profit and gross profit rate since its ending inventory is priced at the highest, most recent costs.

(c) Assuming costs are calculated at the time of each withdrawal, the calculations to determine the inventory on this basis are given below.

1. First-in, first-out.

The inventory would be the same in amount as in part (a), \$6,760

2. Moving average cost.

Received			Issued		Balance		
Date	No. of units	Unit cost	No. of units	Unit cost	No. of units	Unit cost	Amount
May 1					1,150	\$2.9000	\$3,335.00
May 2	1,050	\$3.00			2,200	2.9477	6,485.00
May 7			700	\$2.9477	1,500	2.9477	4,421.61
May 10	600	3.20			2,100	3.0200	6,341.61
May 13			500	3.0200	1,600	3.0200	4,831.61
May 18	1,000	3.30			2,600	3.1275	8,131.61
May 18			300	3.1275	2,300	3.1275	7,193.36
May 20			1,100	3.1275	1, 200	3.1275	3,753.11
May 23	1,300	3.40			2,500	3.2692	8,173.11
May 26			800	3.2692	1, 700	3.2692	5,557.75
May 28	1,500	3.60			3,200	3.4243	10,957.75
May 31			1,300	3.4243	1,900	3.4243	6,506.16

PROBLEM 8-14 (Continued)

Inventory, May 31 is \$6,506.16

Under Moving Average Cost. A new average cost would be calculated each time a purchase was made instead of only once for all items purchased during the year.

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

CA 8-1 TOBACCO GROUP INC.

Overview

Tobacco product sales make a significant contribution to the business (59% of sales and 61% of operating income) and therefore, problems in this area are significant in terms of the ongoing viability of the business. The company may have a bias to downplay the significance of these problems (i.e., litigation etc.). Also, problems in this area may result in a going concern issue so care should be taken to ensure that the related issues are properly accounted for and at a minimum full disclosures are made in the statements.

Users, including shareholders, government and litigants will therefore be very interested in the impact of these lawsuits on the ability of the company to continue to operate profitably. The large pension funds would be especially interested in the statements, wanting to ensure that their longer term investment was secure. This could be an issue given potential going concern problems.

As an analyst, a critical analysis will be done to see whether the accounting reflects the true impact on the company. IFRS is a constraint since this is a public company.

Analysis and recommendations

Issue: Government Settlement Agreements. The company has agreed to pay a large amount (currently \$5 billion per year) into a trust fund.

CA 8-1 (Continued)

Cost of sales/Inventory	Unusual or other expense
- Current treatment. - Affects gross profit margin which is a significant margin in the retail industry. - Represents a direct cost of producing the inventory and should be considered as such in pricing the product – for each cigarette sold, there is a potential future health care cost that should be accrued. - Other.	- Represents an ongoing cost of doing business = ordinary expense since it will be recurring each year. - Like advertising cost or license to do business – period cost. - Other.

In conclusion, support treatment as COS since it really is part of the direct cost of producing each cigarette.

Issue: Class action lawsuit

There are three sub-issues here.

- The \$500 million is properly expensed since it has no future benefit – the company loses it regardless of the outcome of the trial. The only issue is whether to present it separately – minor issue, although due to its size, separate disclosure as an unusual item is prudent since it is nonrecurring.

CA 8-1 (Continued)

- Presentation of the \$1.2 billion escrow account. Is this an asset? There is uncertainty as to whether there is any future benefit to this.

Expense	Asset
- Given past history of settlements, good chance that the company may lose. - Company does not really have access/control over funds as they are held in escrow. - Other.	- Will be returned to the company if they win = future benefit. - To expense may influence the outcome of the case. - The company is vigorously defending itself. - Other.

Conclusion: Very difficult to assess. Showing as an asset may be misleading given the history, however, treating as an expense may prejudice the case. More conservative to expense with additional disclosures regarding uncertainty.

- The lawsuit itself – do not disclose, since it is too early to tell the outcome and also not measurable.

CA8-2 FINDIT GOLD INC.

Overview

Findit Gold Inc. (FGI) is a public company and therefore there is a GAAP constraint (IFRS).

FMC owns 25% and will be interested in the profitability of FGI, since it has been financially supporting the company through its development stages. Strategically – FGI wants to position itself as a low cost producer and therefore, would like its financial statements to reflect this.

FMC's Controller will be assessing the financial stability of the company as well as its ability to generate profits.

Analysis and recommendations

Issue: Valuation of inventory/revenue recognition

Value inventory at HC (LCM)	Value inventory at NRV (selling price)
- = laid down costs - This is the traditional way to measure inventory – results in greater comparability - Shows cost of inventory at lower value – consistent with strategy (although more sophisticated users would understand the impact of the NRV valuation as long as there are appropriate disclosures) - Gold prices fluctuate significantly (according to supply and demand) and therefore, are not really measurable and will have to continue to adjust. - Other.	- Results in recognition of revenue as produced - = critical event in the earnings process given the fact that gold is highly marketable, as well as measurable (a commodities market exists for gold – the prices are objectively determinable) - Production is the major event in the earnings process. Once that is complete – no major uncertainties. The refining and selling are minor events. - Results in greater predictability of cash flows. - Other.

CA8-2 (Continued)

Conclusion: Value at NRV given the extreme liquidity of gold. This choice provides better information about future cash flows. Note that many Canadian mining companies currently record inventory at cost.

IC 8-1 GRAPPA GRAPES INC.

Overview

- The company is a private company (owned by the Grappa family) and therefore legally, GAAP is not a constraint. The owners will want the financial statements to provide a measure of the profitability of the company and the insurance company may want to have access to the statements to determine the value of the wine and collapsed cave. The company has decided to follow GAAP because it would like to go to the bank for a loan. The company may choose to adopt IFRS or ASPE.

NB –This case includes some complex issues that are not covered in the text until chapter 16. Students should be encouraged to try to account for these more complex instruments either by using the conceptual framework or by looking ahead and doing specific research in the Handbook.

Analysis and recommendations

Issue: How to value the wine in the collapsed caves

Leave as is	Write down
- Do not write down as the company feels that the loss is insured and has hired lawyers to defend this. - Unclear as to whether losses are measurable. - Other.	- The caves have collapsed and it is unclear as to whether the wine is salvageable. - The insurance company has stated that they are not prepared to cover. - Other.

In conclusion, given the uncertainty surrounding the coverage and the amount of loss, should probably write down.

IC 8-1 (Continued)

Issue: How to account for the purchase commitments

Recognize	Do not recognize
- A contract has been signed and the company is legally bound to comply. Therefore this should be reflected in the statements. The risk profile has changed by entering into this contract. This is useful information. - This is more like a derivative instrument in substance since it derives its value from the price of the barrels, and will be settled in the future. It also trades on a market and has a net settlement option (see chapter 16 for more guidance). - Therefore, it should be recognized, valued at fair value and gains/losses recognized in income. - ASPE only supports this treatment where the instrument trades on a market. It is not clear that this is the case here – it appears to be a simple purchase commitment contract between two parties. - At a minimum, consideration should be given to accruing the loss based on the current market value of the barrels as an onerous contract (under IFRS). - Other.	- This is an executory contract (unexecuted) – the company has signed an agreement to purchase but no money or goods have yet changed hands. - As such, it should not be recognized until the barrels are received. - The company feels that the price of barrels will recover and therefore any shortfall will not be realized. Therefore a case may be made for not recognizing the loss.. - The company is not using this contract to speculate – rather they are trying to lock in a supply of barrels that they intend to take delivery of. Since the contracts are not exchange traded, derivative accounting does not apply. - ASPE does not explicitly require recognition of onerous contracts and would assess this as a contingency. Given that they assume that the value of the barrels will recover, the loss may be deemed not likely. - Other.

In conclusion since the company plans to take delivery of the barrels (it needs them for the wine) treat this as an onerous contract and accrue the loss.

IC 8-1 (Continued)

Issue: How to account for the wine futures

Unearned revenues
- This contract is just a sale where the customer has paid a deposit up front. - The revenue may not be recognized until the wine is delivered. - Not a derivative for accounting purposes since the wine has been paid in full upfront. The definition of a derivative requires that there is little or no consideration exchanged upfront, so this is unearned revenue in nature, not a derivative. - Having said that, the value of the sales contract will change as the value of the wine inventory to be delivered changes. - The company may wish to consider valuing the wine itself at NRV. However, as the value of the wine increases, the value of the contract decreases (i.e. the company is locked into selling at a fixed price and will receive no more even if the wine does increase in value). This is essentially a hedged position whereby the company has locked in the selling price up front. The company may want to provide additional disclosures. There is really no point in recognizing changes in value of the wine inventory as under this contract, they will never be realized. - Other.

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 8-1 (Time 25-35 minutes)

Purpose—to provide a number of difficult financial reporting transactions involving inventories. This case is vague and much judgment is required in its analysis. Right or wrong answers should be discouraged; rather emphasis should be placed on the underlying rationale to defend a given position. Includes a product versus period cost transaction, proper classification of a possible inventory item, and a product financing arrangement.

WA 8-2 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to discuss the merits of FIFO, specific identification and moving average in a specific situation. The student determines the effects of the three methods on income and related performance evaluations.

WA 8-3 (Time 25-35 minutes)

Purpose—to provide the student with the opportunity to look at the issues a private company would examine in trying to decide if it should adopt IFRS or private equity GAAP. Specific issues to be addressed relate to biological assets, decommissioning costs, capitalized interest and onerous purchase contracts.

WA 8-4 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to list the reasons why specific audit procedures are performed concerning the measurement and valuation of inventory. This case emphasizes all of the different ways in which the proper compilation of the inventory can be affected by errors. A strong emphasis on cut-off and count procedures is given in this case.

WA 8-5 (Time 40 minutes)

Purpose—to provide the student with an opportunity to discuss the different methods of inventory valuation and where to find guidance for this. Students are to research the standards to find the guidance on reporting: unbilled work in progress for a legal firm; cattle on a farm; seeds that are produced for sale; inventory of mineral ores not yet processed.

TIME AND PURPOSE OF WRITING ASSIGNMENTS (CONTINUED)

WA 8-6 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to discuss the main features of the retail inventory system. In this case, the following must be explained: (a) accounting features of the method, (b) conditions that may distort the results under the method, (c) advantages of using the retail method versus using a cost method, and (d) the accounting theory underlying net markdowns and net mark-ups. This is a relatively straightforward case.

WA 8-7 (Time 25-30 minutes)

Purpose—this writing assignment provides an opportunity to reinforce the major differences between IFRS and private enterprise accounting standards, and to relate the differences to the conceptual framework.

WA 8-8 (Time 15-20 minutes)

Purpose—this assignment requires the student to look at and explain the ethics associated with making impairment decisions about inventory.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 8-1

Memo To: Jack McDowell, Controller

From: Your name, Assistant Controller

Subject: Inventory Accounting

This memo addresses the questions you asked in regard to the area of inventory accounting.

Section 3031 of the *CICA Handbook* and IAS 2 under IFRS indicate that the cost of inventory includes “all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.”

- (a) To the extent that warehousing is a necessary function of importing merchandise before it can be sold, certain elements of warehousing cost might be considered an appropriate cost of inventory in the warehouse. For example, if goods must be brought into the warehouse before they can be made ready for sale, the cost of bringing such goods into the warehouse would be considered a cost of inventory. Similarly, if goods must be handled in the warehouse for assembly or for removal of foreign packaging, etc., it would be appropriate to include such costs in inventory.

However, some costs are not considered product costs and should not be included in the cost of inventory. These include costs involved in storing the goods (unless storage is necessary e.g. the product must be held before next stage of production), abnormal spoilage of materials, labour or other production costs, and interest costs if inventory is purchased on delayed payment terms. Any costs of delivering the goods from the warehouse to customers would be a selling expense, and should not be allocated to goods that are still in the warehouse.

WA 8-1 (Continued)

- (b) It is correct to conclude that obsolete items should be excluded from inventory. Cost attributable to such items is “non-useful” and “non-recoverable” cost (except for possible scrap value) and should be written off. If the cost of obsolete items were simply excluded from ending inventory, the resultant cost of goods sold would be overstated by the amount of these costs. The cost of obsolete items, if immaterial, should be included with cost of goods sold. If material, these costs should be separately disclosed.
- (c) The primary use of the airplanes should determine their treatment on the balance sheet. Since the airplanes are held primarily for sale, and chartering is only a temporary use, the airplanes should be classified as current assets. Amortization would not be appropriate if the planes are considered inventory. If their market value declines below cost, however, a write-down to net realisable value would be required.
- (d) The transaction is a product financing arrangement and should be reported by the company as inventory with a related liability. The substance of the transaction is that inventory has been purchased and the fact that a trust is established to purchase the goods has no economic significance. Given that the company agrees to buy the coal over a certain period of time at specific prices, it appears clear that the company, not the trust, has the liability.

WA 8-2

Given that purchase prices of drilling material are decreasing, the following results will occur from the various inventory costing methods:

	FIFO	Moving Average Cost	Specific I.D.
Net Income	Lower	Higher	Varies

- (a) Therefore, site managers would likely prefer the Moving average cost method because it results in higher net income and, therefore, a higher performance evaluation.
- (b) If FIFO were used, higher costs would be charged to jobs resulting in lower net income and performance evaluation. Managers may see the opportunity to increase their income by delaying their request for materials until the last possible moment (i.e. by waiting, the old higher costs may be taken by other managers who order earlier). This may result in managers waiting too long to request materials and, therefore, not having the materials when they are needed for drilling. This could cause delays in doing the drilling work. Additionally, if it is expected that one-half of the company's drilling material is in the local warehouse, this will in fact not be true. Site managers would want to have the least amount of inventory (if any) on hand at the site. Therefore, if many site managers requested inventory at about the same time, there might not be enough inventory in the local warehouse to fill the need. Such a situation would result in a delay in filling site managers' requests and the drilling work to be done.
- (c) "Fairness" to all site managers can be interpreted to mean that none is advantaged or disadvantaged by the inventory method used and the timing of their decisions to request inventory shipment. While charges to the managers will be affected by when they order relative to when head office buys the inventory under all three of the methods, the moving average method may be the "fairest" because the fluctuations would be averaged out. The longer the time between head office purchases, the "fairer" this approach becomes.
- (d) For income tax purposes, the FIFO method would be preferred because it results in lower taxable income in a period of declining prices.

WA 8-2 (Continued)

- (e) For external financial statements, all three methods (specific identification, FIFO, and moving-average) are generally acceptable and any could be used, regardless of which method is used for internal performance evaluation of site managers or for income tax purposes (recognizing there is a cost to keeping more than one set of records). The guidelines provided in the *CICA Handbook* and under IFRS are that the method selected should: correspond as closely as possible to the physical flow of goods, report inventory on the balance sheet at a value that represents recent costs, and use the same method for all inventory assets with similar economic characteristics. One would have to assess the methods, using these guidelines, in light of the specific circumstances in the company. Therefore, because judgement is involved, any of the methods may be recommended.

It should be noted here that the new CICA section 3031 does not identify LIFO as an acceptable cost formula. However, LIFO is still an acceptable method in the U.S. Therefore, the AcSB intends to allow Canadian public companies also listed on U.S. exchanges to use U.S. GAAP.

FIFO - may more closely match actual costs against actual revenues if materials purchased are requested and used quickly.

Moving average cost - if materials are homogeneous and randomly requested and used, moving average cost may be argued as being fair because it reflects the underlying system of operations in the company.

Specific identification should only be used if the items are not homogeneous and easily substituted for one another.

WA 8-3

Report to owners of PER Limited

From: New controller

Re: Conversion to IFRS

There are some significant reporting differences between IFRS and ASPE as it would relate to PERO's business. These issues are addressed below, along with a discussion on the impact on the company's balance sheet, income statement, and management bonus plan.

- (1) The first of these relates to the reporting of the timber lots and standing trees. These standing trees qualify as a biological asset under IFRS. Biological assets are living assets and are reported and measured at the fair value less costs to sell at every reporting period. This has several implications for the company:
 - a. Any change in the fair value less costs to sell is immediately reported in net earnings for the year. Consequently, if the fair value increases, net income will also increase. If fair value declines, net income will also decline. This will create volatility in the company's net earnings. Under ASPE, there is little guidance on the reporting of these assets. You have reported these at original cost and recorded a depletion amount annually on these timber assets. This accounting treatment could continue under ASPE.
 - b. Determining the fair value will require the company to incur costs to either take the time internally to gather the information or hire independent appraisers to make the determination. If a discounted cash flow method is used to determine fair value, assumptions to determine fair value would include: growth rates of the standing trees, future harvesting, prices of the wood, costs to maintain the forests, and the appropriate rate to discount these cash flows.
 - c. At the time of harvest, the fair value less costs to sell of the timber harvested would now be the input cost to the inventory production. As such, this might reduce the gross profit percentages depending on how high the fair value is and the prices that can be obtained on the sale of

WA 8-3 (Continued)

the lumber. In other words, this method brings the fair value changes in the assets into income over time, rather than at the point of sale of the end product – the lumber. This is very different from ASPE, where the cost of production will only include a depletion charge (or depreciation expense) on the timber asset. Thus, ASPE will likely result in lower input costs and higher gross margins on the sale of the lumber.

- d. The impact on the balance sheet of moving to IFRS would be that assets could change in value significantly year over year. A similar volatility would be seen on the income statement. Since the management bonus is dependent on net earnings and gross profits, both of these numbers would also be impacted, although it is difficult to determine precisely whether the resulting management bonuses would be higher or lower each year.
- (2) Under IFRS, the decommissioning costs that are related to the production process must be included in the cost of inventory. This would result in the costs being expensed earlier, and net earnings and gross profits would be lower as a result. Under ASPE, the decommission costs can be added to the value of the plant, as the company currently has done. This would expense these costs over a longer period of time, as the asset is depreciated. The impact of moving to IFRS would be to lower the assets on the balance sheet, lower net earnings, and lower the management bonus.

The interest costs incurred for the production process relate to the production process and are capitalized to inventory under IFRS. This would defer the costs into inventory and delay the expense recognition until the inventory is sold. Under ASPE, the company has a choice to either expense interest immediately, as the company currently does, or capitalize to the inventory. If the interest costs are capitalized, then this would result in higher accumulated net earnings, higher gross margins and higher accumulated management bonuses. Gross margins would be lower in each specific year and interest expense will be lower as well. Net income will be higher or lower in each year depending on whether the inventory and the interest costs capitalized are increasing or decreasing. As long as there are interest costs deferred in ending inventory, the accumulated incomes and bonuses would be higher.

- (3) The resin contract is an example of an onerous contract. Under ASPE there is no specific guidance on how to treat this contract. This means that the company may not have to make any accounting adjustments for the fact that the cost of resin currently is lower than cost per the contract.

WA 8-3 (Continued)

Input costs would continue to be what the company actually paid. Under IFRS, a provision for this onerous contract would have to be reported as a liability. The amount would either be the costs to break the contract or the cost to be paid for items that will no longer be needed by the firm for the term of the contract. This would be expensed when the provision was recorded. At each reporting period until the contract is settled, the provision would have to be reviewed and adjusted when required. This would result in an additional expense (or subsequent reversal) to the net earnings. The impact on the management bonus would likely be a reduction in the amount of the bonuses.

As you can see from the above analysis, there are some significant account policy differences and costs to be incurred by the company on conversion to IFRS. The actual impact on future financial statements cannot really be predicted, except to say that there would be more volatility.

WA 8-4

- (a) Securities held by an investment company – Investments held by an investment company are considered financial instruments and are covered in CICA 3856 *Financial Instruments* and IAS 32 *Financial Instruments: Presentation* and 39 *Financial Instruments: Recognition and Measurement*. These investments are measured at fair value at every reporting period. Any changes in the fair values are directly reported in the income statement. Fair value would normally be determined using current, observable market prices.
- (b) Unbilled work in progress for a legal firm (ie. employee and partner time spent on client work not yet billed) – This is covered in CICA 3400 *Revenue* and IAS 18 *Revenue*. In providing a service to clients, the company can record the revenues earned over time as the service is provided as long as no significant uncertainties exist as to measurability or collectability. Therefore, the unbilled time spent by the partner or employee delivering the client service will be recorded as work in progress at the appropriate billing rates and recognized as revenue. The unbilled work-in-progress is reviewed regularly to ensure that it is still collectible.
- (c) Milk from dairy cattle – Under ASPE, there is no special guidance for this type of inventory and therefore it would be carried at the lower of cost and net realizable value. Under IAS 41 *Agriculture*, the milk is classified as agricultural produce as it is derived from the dairy cattle, a biological asset. The milk is initially measured at its fair value less costs to sell at time of production. Any change in this fair value is reported to the income statement.

WA 8-4 (Continued)

- (d) Sheep are considered biological assets. Under ASPE there is no specific guidance, and usually the sheep are recorded at the lower of cost and net realizable value, which would be following primary GAAP for similar assets. Under international GAAP, IAS 41 *Agriculture* would require the sheep to be classified as biological assets. The assets are recognized at fair value less costs to sell. Any changes in the fair values are included in the net earnings for the period.
- (e) Construction contracts in progress – Under ASPE this would be covered under CICA 3400 *Revenue* where the revenue is recorded using the percentage of completion method. IAS 18 covers in more specific detail, the accounting for construction contracts in progress. Under both standards, an amount is reported on the balance sheet as the construction contract progresses. The costs and profits earned to date on the contract (as determined using the percentage of completion basis) are reported net of any related progress billings to date. The income statement would show the revenue recognized based on the percentage of completion of the contract, and any related costs incurred to date.
- (f) Nickel resources not yet mined – are reported under ASPE using CICA 3061 *Property, Plant and Equipment* and IAS 16 *Property, Plant and Equipment* as mining properties. The mining properties are recorded at cost less accumulated depreciation (depletion) and accumulated impairment. IFRS 6 also allows the costs to be capitalized as mining properties. However, IFRS 6 is very specific in the types of costs that can be capitalized during the exploration and evaluation phases. Once the nickel is being mined, the asset will be depreciated, usually on a units-of-production method and the costs allocated to expenses over time.

WA8-5

The main driver behind ASPE is to reduce the complexity in preparation of the financial statements. This is highlighted in the differences between PE GAAP and IFRS.

Generally, the requirements under ASPE and IFRS are very similar with respect to recognizing and measuring inventories. One significant area of difference relates to biological assets and agricultural produce which must be measured at fair values under IFRS. In contrast, ASPE has no specific guidance, and after harvest, the agricultural produce's carrying cost becomes the inventory's deemed cost. This method of measuring biological assets and agricultural produce is far simpler than under IFRS.

With respect to capitalizing interest as part of inventory costs, IFRS requires that interest be capitalized during the production process. ASPE, only requires that companies choose whether or not interest is capitalized during the production process for a qualifying asset, and if so, then disclosure of the amount capitalized is required. There is no guidance on what is a qualifying asset. ASPE has again reduced the complexity for private enterprises if they so choose.

The last area of difference is with respect to production related liabilities. Asset retirement and decommission liabilities related to the production process must be included in the costs of inventory under IFRS. In contrast, ASPE requires these costs to be added to the carrying value of the PPP&E asset. This would result in less complex reporting and measuring issues for inventory items. For onerous contractual obligations arising from production commitments, ASPE provides no guidance with respect to the obligations. IFRS requires a more complex review of contracts at each reporting period to determine whether they are onerous, and if so, that they be measured at fair value.

WA8-6

As the dairy farm would sell milk as its main product, the milk would be recorded as inventory. Under IFRS, there is special guidance for this type of accounting provided under IAS 41 *Agriculture*. The milk would be recorded as an agriculture produce which is measured at its fair value less costs to sell at the point of harvest.

The dairy cows would be considered biological assets which are measured at their fair value less costs to sell initially and at the end of each reporting period. Both the biological asset and the agricultural produce can be recorded in this way because they are controlled by the entity, it is probable that future economic benefits associated with the assets will flow to the farm, and the fair value can be measured since there is a market for both milk and the sale of cows.

When a new dairy cow is purchased by the farm, it would be measured as its fair value less costs to sell. As the purchase price and selling costs of the cow would be known at this time, the cow could be added to the financial statements as a biological asset.

If a dairy cow can no longer product milk its fair value would likely decrease. While the cow would still be owned by the farm, at the end of the reporting period they must revalue the cow at its current fair value. The decrease in the fair value of the cow would be recorded as an unrealized loss and flow through other comprehensive income in the period in which is occurs.

Under ASPE, specific guidance for biological assets and agricultural produce does not exist. Instead these assets are typically recorded at the lower of cost and net realizable value. When the dairy cow was initially purchased, it would have been recorded at its cost. Then if the fair value of the dairy cow decreased below the initial cost, as in the example above, the loss would be recognized in a similar manner as the inventory is written down to net realizable value. Note that if the fair value of the cow increased above its original cost, this gain would not be recognized under ASPE.

WA8-7

IFRS requires that a company disclose the following information in addition to the disclosure requirements under ASPE:

- i. Carrying amount of inventory carried at fair value less costs to sell
- ii. Details about writedowns and reversals of inventory
- iii. Biological assets (gain or loss from changes in fair value less cost to sell, description of each group, nature of activities involving biological assets, non-financial measures/estimates of physical quantities of the assets and their output of agricultural produce, etc.)

The carrying amount of inventory at fair value less costs to sell is a good indication to the users of the financial statements as to what portion of the entity's inventory has gone down in value and what portion of the inventory will not recover the costs incurred in making it saleable. Details about writedowns and reversals likewise provide users of the financial statements with a better understanding of the losses and gains incurred related to inventory and this information could potentially indicate whether the losses in inventory value are likely to recur. The increased disclosure requirements for biological assets are significant. Given the variable nature of biological assets and agricultural produce, this increased disclosure can give users a better understanding of the various factors that would impact the earnings of such an operation. Different events and markets impact these assets compared to other goods and so the added disclosure can allow readers a better understanding of events impacting the asset values.

In summary, the requirements for inventory disclosure are greater for IFRS than for ASPE and these requirements result in greater information being shared with the readers of financial statements so that they may better understand the factors impacting inventory values.

WA8-8

One major issue to note here is that the company compensates management based on the net earnings of the company and so it is unlikely that management would want to recognize a loss on inventory write downs. This may be a reason for the CEO's response that the assets are being reported in accordance with IFRS when in fact they are not. Presenting the full inventory amount at cost would give false information to the users of financial statements as half of the inventory is likely to expire before it is sold and will have a net realizable value of zero.

The disclosure requirements of IFRS are significant and so the statements provide more information to users. Any write-downs of inventory are recognized as an expense in the period and the circumstances or events for the write-down must be disclosed. There is likelihood that the inventory is partially obsolete given the cancellation of the contract with the hospital. Proper disclosure would require that these events be disclosed and an estimate of the net realisable value should be performed.

In conclusion, the CEO would be informed that a provision for obsolescence would be appropriate so that the financial information being presented offers a high degree of relevance. There should also be note disclosure in the financial statements explaining the reason for the excess inventory holdings.

RESEARCH AND FINANCIAL ANALYSIS

RA 8-1 Shoppers Drug Mart

- (a) Shoppers has an inventory balance of \$2,042,302 at December 31, 2011 and \$1,957,525 at January 1, 2011. As outlined in Note 3(k), the company has merchandise inventory which includes prescription medications. \$6,416,208 was recognized as an expense for cost of goods sold for the year ended December 31, 2011.
- (b) Note 3 outlines the accounting policies for the inventory. The merchandise inventory is measured at the lower of cost and estimated net realizable value. Cost is determined using the first-in, first-out (FIFO) method and includes direct costs and costs incurred to bring inventory to its current location and condition. Rebates and other consideration from vendors are recognized as reductions in the cost of inventory unless related to reimbursement of selling costs or services. Net realizable value for the merchandise inventory is determined using estimated selling prices less estimated costs to sell. There were no adjustments required when the company converted from the previous Canadian standards to IFRS. Shoppers recognized a write-down of inventory to net realizable value of \$39,943 in the year ended December 31, 2011 and a write-down of \$37,884 in the year ended January 1, 2011.

RA 8-2 STORA ENSO OYJ

(a) As described in Note 1, the inventories are reported at the lower of cost and net realizable value. Cost is determined using either FIFO or a weighted average if it approximates FIFO. Costs included in finished goods and work-in-progress include raw materials, direct labour, depreciation, other direct expenses and related production overhead. Interest is excluded. Net realizable value is the estimated selling price less costs to complete and sell. A valuation allowance is made for obsolete and slow moving finished goods and spare parts and is recorded when the costs exceed the net realizable value.

(b) The company outlines in Note 17, the various components of inventory which includes the following, along with the percentages: (in millions of euros)

	2011 EUR	2011 %	2010 EUR	2010 %
Materials and supplies	400.6	26.2	386.8	26.2
Work in progress	68.7	4.5	66.5	4.5
Finished goods	713	46.6	671.6	45.5
Spare parts and consumables	275.2	18.0	270.4	18.3
Other inventories	27.7	1.8	27.2	1.8
Advance payments and cutting rights	150.1	9.8	156.3	10.6
Obsolescence – spare parts	-87.6	-5.7	-88.6	-6.0
Obsolescence – finished goods	-14.9	-1.0	-11.9	-0.8
Net realizable value provision	<u>-4.1</u>	<u>-0.3</u>	<u>-3.7</u>	<u>-0.3</u>
	<u>1,528.7</u>	<u>100.0%</u>	<u>1,474.6</u>	<u>100.0%</u>

In both years, the finished goods represented the highest component, increasing slightly in 2011 to 46.6%. All the other items remained fairly stable over the two year comparison and changed by less than 1%. If the finished goods have been increasing as a percentage of the total, then there might be cause for concern as this might indicate that the company was having trouble selling the finished goods. The increase is small in this case and may not indicate a real problem.

From the income statement, the company reports the change in inventories for finished goods and work-in-progress. However, all the costs are itemized separately (this is a statement by nature). Consequently, there is no cost of goods sold, and an inventory turnover ratio cannot be calculated.

RA 8-2 (Continued)

- (c) The inventory for the standing trees is reported as biological assets. Note 1 states that biological assets are reported at fair value less estimated point of sale costs at harvest. The company uses a discounted cash flow model to determine this value. Based on continuous operations, sustainable forest management and predicted growth rates for one growth cycle, the future harvested amounts are forecasted and multiplied by the actual wood prices. From these cash inflows are deducted the costs of fertilizer and harvesting. These net cash flows are then discounted to determine current present value. As described in Note 2, under uncertainties and judgments, the company states that these forecasted cash flows require assumptions related to estimates in growth, harvest, sales price and costs. The company makes regular surveys of the standing growth to establish the volumes that will be available for cutting, and the current growth rates of the trees.

Note 13 provides some description of these assets. The forests are in Brazil, Finland and Sweden, China and Uruguay. The company indirectly owns forest assets valued at EUR 2.238 billion through its Associates, but only EUR 212.6 million directly. The company's own assets are in China, and Brazil.

Note 13 details the changes in the biological asset balance from the opening balance to the closing balance. The amounts harvested in 2011 totaled EUR 5.1 million. This would be added to the costs of inventories produced. Other changes in 2011 were due to translation differences of EUR 10.0 million; and additions of new assets of EUR 17.2 million.

The amount that the value of the biological assets changed was -EUR5.1 for 2011 and -EUR 4.0 for 2010 which is reflected on the income statement. So the valuation change caused net income to decline in 2011, and in 2010 and related entirely to harvested amounts and damages.

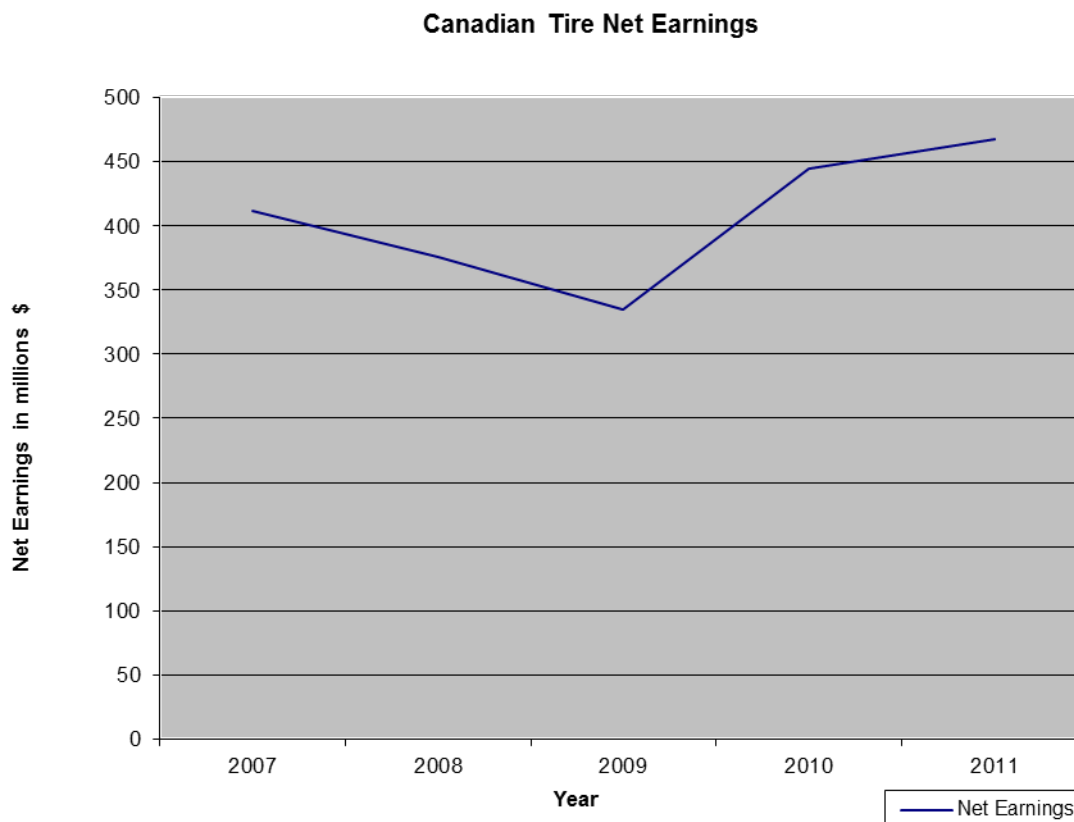
- (d) The company uses the valuation allowance method. Note 10 details the allowances for stock obsolescence related to spare parts, finished goods and net realizable value (stock valuation). As shown in the schedules in this note, the amounts in the allowance at December 31, 2011 were: spare parts – EUR 87.6 million, finished goods EUR 14.9 million and net realizable value for stock – EUR 4.1 million. There were charges to the income statement of EUR 11.1 million, EUR 2.3 million and EUR 2.0 million for spare parts obsolescence, finished goods obsolescence and net realizable value write downs, respectively. Also, during the year, there were reversals of EUR12.3 million, EUR 0.8 million and EUR 1.9 million for spare parts obsolescence, finished goods obsolescence and net realizable value write downs, respectively.

RA 8-2 (Continued)

- (e) Certainly, all of this disclosure is useful. However, we cannot determine a days in inventory calculation based on the information as it is currently reported. So it would be useful to have a cost of goods sold number provided. In determining the costs included in finished goods and work in progress, how is the overhead allocated – what is normal capacity for example?

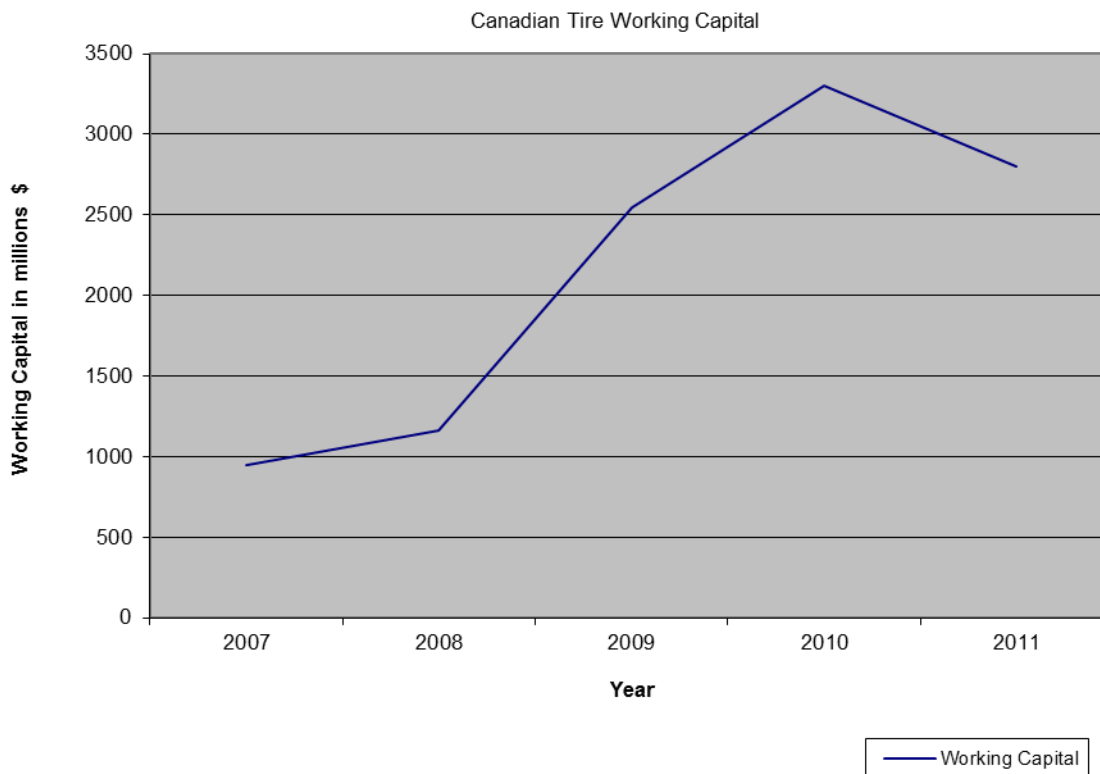
The assumptions on the determination of the biological assets could be more detailed to provide specifics (or ranges) for the growth rates, selling prices and the discount rate used in determining fair value of the biological assets. Also, yields and hectares would also be useful information.

RA 8-3 CANADIAN TIRE CORPORATION LIMITED



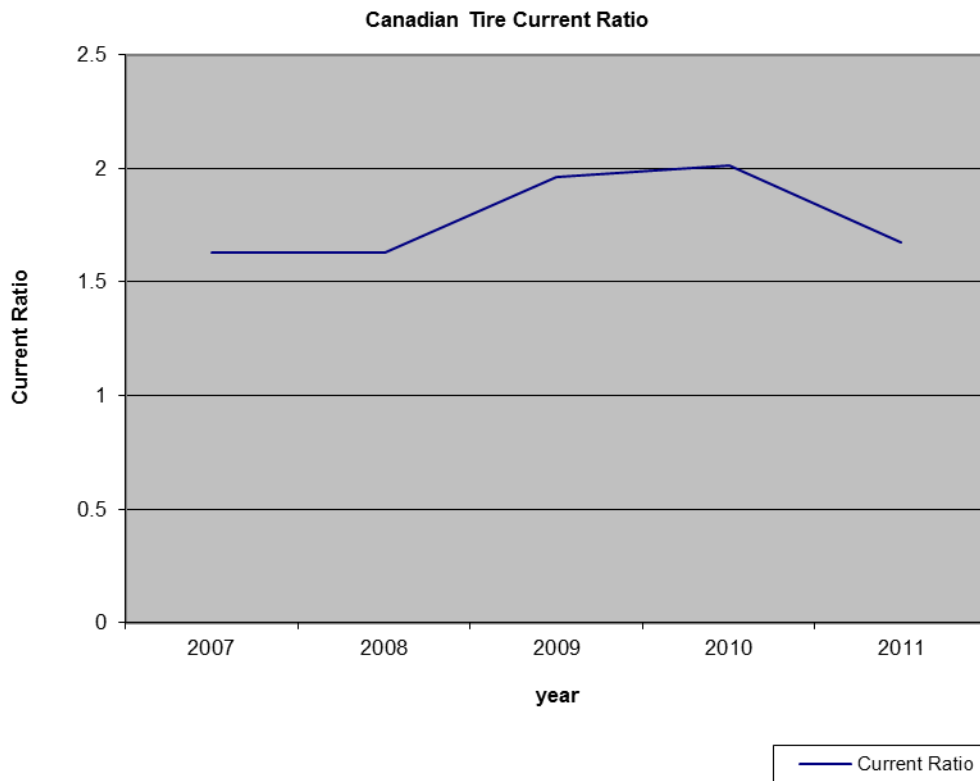
Based on the above graph, we can try to predict 2012 net earnings. Earnings appear to be increasing but the past several years were a time of an economic recession. Sales have increased the past two year, and resulted in net earnings increases. Based on the graph we would expect a net earnings increase to about \$475-500 million in 2012, however, given the recent recession resulting in significantly lower earnings for 2008 and 2009 the upcoming earnings are uncertain.

RA 8-3 (Continued)



There was a decrease in working capital for 2011. This is likely related to the significant increases in the previous 3 years being unsustainable. In looking at the balance sheet this appears to be due to a large increase in current liabilities resulting from increases in deposits and trade payables. Given the spike in working capital in 2009 and 2010 it is reasonable that it should decline somewhat.

RA 8-3 (Continued)



As discussed above for the earlier graph on working capital, there was a significant increase in the current ratio due to the increase in current assets in prior years. The decrease in the current ratio is related to the decreased working capital which is returning to previous lower levels. Given the sharp decline from the prior year it is difficult to estimate the current ratio for 2012. Since there has been growth in net earnings the previous years it may be that the current ratio and working capital will stabilize in the near future.

RA 8-4 INVENTORY MANAGEMENT SYSTEMS

Inventory management systems allow companies to improve the way they manage their inventory. By communicating online in real time using wireless technology, generating and scanning bar codes, sorting items quickly by a variety of attributes, these systems result in efficiencies in the entire inventory management chain ranging from ordering, shipping, receiving, picking and counting. Two examples of companies that have gained such efficiencies are Matsushita Electric of Canada Ltd. and Hydro Mississauga.

Matsushita installed a system that uses hand held wireless computers to automate every stage of warehouse management and inventory control. By communicating online, the company is able to update its inventory records within fifteen minutes of receiving a shipment and products often go directly from receiving to picking without having to be put away at all. The main efficiencies gained are reduced turnaround time from receiving to picking, elimination of manual data entry and the related data entry errors, freight consolidation, and elimination of the monthly inventory day. This gives the company an additional selling day each month, resulting in increased sales revenue. These efficiencies also affect the income statement in the form of reduced wage expense as a result of increased picking capacity and reduction of warehouse and data entry staff. By consolidating shipments, the company also saves the customer money on shipping costs. Reduction of shipping errors impact accounts receivable on the balance sheet in that more accurate receivables relating to more satisfied customers are collected more quickly. The amount of inventory on hand is reduced since the company knows specifically what it needs to have on hand to meet orders and requires less stock due to reduced lead times. Matsushita estimates the system has saved the company more than \$12 million a year.

Hydro Mississauga also installed a new wireless inventory and warehouse management system and reports similar efficiencies to those of Matsushita. Management cites the improvement in the speed and accuracy of inventory reporting as a key benefit. By reducing the time spent at the warehouse each morning, the service crews gain 1 to 2 hours of time at the jobsites each day. This could translate into reduced crew wages of 20 to 25%. The company also saves money on clerical wages due to the elimination of manual data entry and related corrections and reconciliations. Hydro Mississauga reports a reduction in inventory levels of \$300,000 (5%) and a doubling of inventory turnover.

RA 8-5 ANDREW PELLER LIMITED

- (a) Andrew Peller includes in inventory: packaging materials and supplies, bulk wine and finished goods. Inventory expressed as a percentage of total current assets is 38.6% in 2012 and 35.3% in 2011, indicating that inventory is an important asset.
- (b) According to Note 1, inventories are valued at the lower of cost and net realizable value. Cost is based on weighted average cost and includes direct costs, manufacturing overhead, including amortization of capital assets that are attributable to inventory, and borrowing costs for some inventories that require a substantial period of time to prepare for sale. The grape inventory is recorded at fair value less costs to sell at the harvest point.
- (c) The largest component of inventory is bulk wine, representing more than 50% of the total inventory value. This is expected given the long production process required to make wine and spirits. Depending on the type of wine or spirit being produced, production could take many years before it is ready for sale.
- (d) As per the income statement, the amount of cost of goods sold, excluding amortization was \$169,626 for 2012 and \$162,158 for 2011 (in thousands). The company recognized write downs of inventory of \$1,663 in 2012 and \$1,357 in 2011 (in thousands). There is no disclosure of reversals of write-downs, and therefore we can assume that there were none during either 2011 or 2012.
- (e) For fiscal year ending March 31, 2012

$$\text{Inventory turnover} = \frac{\text{Cost of Goods Sold} + \text{amortization expense}}{\text{Average Inventory}} = \frac{\$169,626 + \$4,826}{\frac{\$110,256 + \$94,692}{2}}$$

= 1.70 years, or 621 days

The average age of the inventory is 1.70 years. This is unusually high in general terms but is not uncommon for a winery since inventory includes vintage products held intentionally for aging. Since part of the inventory held by Andrew Peller is wine which requires aging, it is not surprising that the inventory turnover is slow, compared to, say, a retail operation.

RA 8-5 (Continued)

(f) Gross profit ratio = gross profit / net sales

2011 \$98,595 / 265,420 = 37.1%

2012 \$102,431 / 276,883 = 37.0%

Gross profit % was fairly consistent over the two years and indicates strong profitability and financial performance. Changes in the gross profit margin would result from:

- changes in the product mix if different products have different margins;
- if input costs for grapes and other costs are higher due to poor crop yields;
- if prices actually charged for the product declined due to competitive pressures.

(g) Previously, under Canadian GAAP, the vine assets would be recorded at cost and amortized. The vineyards are now reported as biological assets recorded at fair value less costs to sell. If the fair value is higher than current carrying cost, then the assets on the balance sheet will increase (and vice versa). Any current year's changes are immediately reflected in the income statement, which will cause net earnings to be more volatile. If there is an increase in fair value, this will increase net earnings; if the fair value declines, then net earnings will also decline. As the grapes are harvested, this fair value at the time of harvest will be the cost to include in the production of the wine inventories as grapes are recorded as agricultural produce under IFRS. This will impact the value of the inventories and the related gross margins on subsequent sale.

RA 8-6 LOBLAW COMPANIES LIMITED AND EMPIRE COMPANY LIMITED

- (a) Loblaw is primarily a retailer of food, general merchandise, drugs and financial products. It operates 584 corporate owned stores and 462 franchisee owned stores. Empire operates in two businesses – food retailing and real estate. Food retailing is the distribution of food products throughout Canada under the banners of Sobeys, IGA, and FreshCo to name a few. The company has owned and franchised outlets. The real estate division is involved in the development of commercial properties held for food- anchored retail plazas, and development of residential housing lots for sale.
- (b) All figures in millions of Canadian dollars.

	Loblaw Dec. 31	Loblaw Jan. 1	Empire May 5	Empire May 7
	<u>2011</u>	<u>2011</u>	<u>2012</u>	<u>2011</u>
Inventory	\$2,205	\$1,956	\$825.3	\$823.0
Total Assets	\$17,428	\$16,841	\$6,913.1	\$6,518.6
% of total assets	12.7%	11.6%	11.9%	12.6%

Both companies have a similar investment in inventories relative to total assets. However, Loblaw has slightly increased their inventory levels as a percentage of assets by 1.1% while Empire slightly decreased inventory levels by 0.7%.

- (c) Loblaw (Note 2) reports inventories at the lower of cost and net realizable value. Costs include the purchase costs, net of vendor allowances and transportation costs. Storage costs, indirect administration costs and some selling costs are excluded from inventory cost. Seasonal general merchandise and inventory at the distribution centres are measured using the weighted average cost method. The retail method is used for the store inventories. Net realizable value is estimated based on retail prices that the company expects to realize on the sale (including considerations for seasonal price fluctuations) less any costs required to sell. The company writes down inventory for damage, obsolescence or decreased selling prices which may be reversed in a subsequent year if estimates change.

RA 8-6 (Continued)

Empire (Note 3) states that all inventories are valued at the lower of cost and realizable value. The cost basis of the warehouse inventories is determined using the weighted average cost basis. The cost basis for the retail inventories is determined using the weighted average cost basis using either the standard cost or the retail method. Real estate properties are valued at the lower of cost and net realizable value. Cost of inventories include the purchase cost, less vendor rebates and allowances, and other costs (primarily freight) required to get the inventories to their present location and condition. Costs excluded from inventory are storage costs and administrative overhead. Net realizable value is determined using prices adjusted for seasonality, less costs to sell. Inventories are written down to net realizable value when damaged, obsolete, or the selling price has declined below cost. If these factors change in the subsequent year, the write down is reversed.

Based on the above discussion, the inventory valuation methods are very similar. The one big difference is that Empire has real estate property inventory, in addition to merchandise inventory.

- (d) Loblaw - As per the Consolidated Statement of Earnings and Note 9, the amount charged to expenses for inventory was \$23,894 million for the current year. Inventory was written down to net realizable value with an expense of \$20 million. There was no reversal of previous write downs in the current year. Empire, in Note 4, states that the amount of inventory costs in the expenses for 2012 was \$12,159.7 million. Inventory write-downs to net realizable value resulted in an expense of \$13.1 million. There were no reversals of inventory write downs in the current year.
- (e) Note 2 for Loblaw states that the company records vendor allowances as reductions in cost of sales, inventories, and selling and administrative costs. In special circumstances, assets may be reduced if the vendor payment relates to assets. There is no discussion on timing of recognition of the vendor allowances. Note 3 states that Empire accounts for vendor allowances as reductions in cost of sales, and inventories. Vendor allowances that are contingent on reaching certain minimum purchase levels are not recorded until it is probable that these levels will be met.

RA 8-6 (Continued)

(e) (Continued)

The treatment by both companies appears appropriate, but Loblaw does not discuss the treatment of vendor allowances that are contingent on minimum purchase levels that have not yet been met. Empire has appropriately stated that these types of allowances are recognized when they are probable and can be estimated.

If the proposed changes in the conceptual framework are adopted, then the value of these contingent vendor allowances will be measured based on probabilities rather than just determining if they are probable or not.

(f)

	Loblaw <u>Dec 31, 2011</u>	Empire <u>May 5, 2011</u>
Inventory charged to expenses	\$ 23,894	\$ 12,220.5
Inventory beginning	1,956	823.0
Inventory ending	2,025	825.3
Inventory turnover	12.00	14.83
Days to sell inventory	30.4	24.6

(g) Both of the companies have very similar inventory policies. Differences in the ratios above could be due to:

- Empire has real estate inventory which is also sold. If we had been given the expense breakdown by food and real estate, then we could have determined the inventory turnover on food separately, and compared this to Loblaw.
- The mix of inventory is different – with Loblaw selling more general merchandise other than just food. The turnover on this type of inventory is likely longer than for food, and will cause the days in inventory to be higher.

RA 8-6 (Continued)

- Both companies have franchisees and corporate owned stores. If Empire has more franchisees than Loblaw, then they might have more inventories in the warehouse (waiting to be shipped to the franchisees). The inventory at the franchisees' stores would not be included in Empire's inventory. This would also cause differences in length of time the inventory is available before being sold. Only the inventory in the warehouse and the corporate owned stores would be included in inventories.

RA 8-7 Research

Student's responses will vary according to the company they choose. Students should identify the specific costs mentioned and classify them as direct materials, direct labour, or overhead. They should make note of whether fixed overhead is treated as a period cost (variable costing) or as a product cost (absorption costing). They may find that smaller companies often rely on periodic inventory systems for cost/benefit reasons.

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CHAPTER 9

INVESTMENTS

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing Assignments
Understanding investments	1, 2	1, 22	8, 9, 1, 11, 12, 13	9
Debt/equity securities:	15			
(a) cost/amortized cost model				
- equity securities	3	14, 18	5, 11	
- debt securities	4, 5, 6, 7	2, 3, 4, 6	3, 6, 7, 13	2, 3
(b) fair value through net income (FV-NI) model				
- equity securities	8	7, 9, 10, 11, 14, 18, 20, 21	1, 2, 8, 10, 13	2, 3, 4
- debt securities	9, 10	5, 6, 8	2, 3, 6, 7	
(c) fair value through other comprehensive income (FV- OCI) model	11, 12, 13	10, 11, 12, 13, 14	4, 5, 7, 8, 9, 10, 11, 12, 13	3
Impairments	16	15, 16, 17, 21, 23	6	5, 7
Investments in associates				3, 4
(a) equity method	21	18, 19, 20, 21, 23, 24	8, 10, 11	
(b) other		18	8, 10, 11	
Investments in subsidiaries	21			1
Analysis, disclosures, reporting and statement presentation	14, 22	12, 18, 24	1, 4, 5, 9, 12, 13	8
IFRS and ASPE comparison				6

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E9-1	Investment classifications.	Moderate	25-30
E9-2	Entries for cost/amortized cost investments.	Simple	10-15
E9-3	Entries for cost/amortized cost investments.	Simple	25-30
E9-4	Entries for cost/amortized cost investments.	Simple	20-25
E9-5	Entries for fair value through net income investments in bonds; separate interest.	Simple	15-20
E9-6	Investments in debt instruments accounted for using fair value through net income; also at amortized cost.	Moderate	25-30
E9-7	Fair value through net income investment model entries.	Simple	10-15
E9-8	Investments in debt instruments accounted for using fair value through net income; interest not reported separately	Moderate	25-30
E9-9	Entries for fair value through net income investments in shares; transaction costs.	Simple	15-20
E9-10	Entries for fair value through net income and fair value through other comprehensive income equity investments.	Simple	10-15
E9-11	Equity securities entries – FV-NI and FV-OCI.	Moderate	20-30
E9-12	FV-OCI investment entries, financial statement presentation.	Simple	25-30
E9-13	FV-OCI equity entries; determine AOCI balance	Simple	15-20
E9-14	Cost, FV-NI, FV-OCI entries, effects and comparison	Moderate	30-35
E9-15	Impairment of debt investment and recovery of value under ASPE, IAS 39, IFRS 9 (amortized cost)	Moderate	20-25
E9-16	Impairment of debt investment and recovery of value under FV-NI; also ASPE, IAS 39, IFRS 9, if amortized cost	Moderate	30-35
E9-17	Impairment entries for equity investments using IAS 39 and under ASPE: 3 different situations	Difficult	35-40
E9-18	ASPE with and without significant influence	Simple	15-20
E9-19	Equity method	Simple	10-15
E9-20	Fair value and equity method compared.	Simple	15-20
E9-21	Long-term equity investments and impairment	Moderate	25-35

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
E9-22	Determine proper income reporting.	Simple	10-15
E9-23	Equity method with cost in excess of carrying amount; impairment	Moderate	25-30
E9-24	Equity method with cost in excess of carrying amount.	Moderate	25-30
P9-1	FV-NI entries and reporting for equity investment.	Moderate	20-25
P9-2	FV-NI entries for equity and debt investments	Moderate	40-45
P9-3	FV-NI and amortized cost bond investment entries.	Moderate	40-45
P9-4	Purchase and sale of FV-OCI equity investments, and presentation.	Moderate	35-40
P9-5	FV-OCI entries and reporting, comparison to cost method.	Moderate	50-60
P9-6	Amortized cost and FV-NI entries for bond investment; impairment entries	Complex	50-60
P9-7	Entries for amortized cost, FV-NI, and FV-OCI investments; calculate interest between interest dates.	Moderate	35-40
P9-8	Fair value adjustments and presentation of FV-NI, FV-OCI, and equity method investments; choice under ASPE if significant influence.	Moderate	35-40
P9-9	Financial statement presentation of FV-OCI investments.	Moderate	25-35
P9-10	Entries for FV-NI and FV-OCI investments, as well as equity method investments.	Complex	35-40
P9-11	FV-OCI and equity method entries under IFRS, choices and entries under ASPE	Moderate	35-45
P9-12	Deduce financial statements from limited information using FV-OCI; compare to FV-NI	Complex	25-30
P9-13	FV-NI, amortized cost, FV-OCI and equity method entries and preparation of partial financial statements	Moderate	50-60

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 9-1

- (a) The investment in Company A is an investment in a debt security, and the investment in Company B is in an equity security.**
- (b) Bali Corp. is a creditor of Company A because A has a contractual obligation or liability to repay the \$10,000 borrowed, as well as interest on the borrowed funds. Therefore, Bali has invested in another company's debt.**

Company B, on the other hand, does not have an obligation (and therefore does not have a liability) to repay the funds Bali invested, nor to provide a return to Bali on those funds. Instead, Bali has taken on the risk of a residual shareholder by profiting if Company B does well and losing if B does not do well. This is an equity interest in Company B.

BRIEF EXERCISE 9-2

- (a) It would not be unusual for all of these companies to have some level of investments on their balance sheets, but those most likely to report a significant proportion of their assets as investments are the university, the insurance company and the pension plan. In each case, knowing the business model of the type of organization is useful in making this determination.**

An old established university is very likely to have built up considerable endowment funds over a period of many years. These donations and bequests are invested, and the university uses the income to pay for scholarships, for example.

BRIEF EXERCISE 9-2 (Continued)

The insurance company collects insurance premiums in advance from its policyholders, and it invests the monies received to increase the funds it has available to pay out when claims have to be paid as a result of insured losses.

The pension plan usually receives cash from employers and employees as the employees provide services to an organization—many years ahead of when the employees retire and pensions have to be paid out. To increase the funds available for payout in the future, pension plans invest the contributions as they are received.

- (b) All three of these organizations typically invest in a mix of debt and equity securities with the proportion of each depending on the level of risk each is required or willing to take on. Some pension funds, for example, are so large that they have been expanding into mortgages and other asset-backed securities, real estate investments, shopping centres, toll roads, etc. looking to diversify their holdings and to increase the rate of return they earn.**

BRIEF EXERCISE 9-3

(a)

Other Investments.....	13,332	
Cash		13,332
(\$13,200 + \$13,200 X 0.01)		

(b)

Cash	600	
Dividend Revenue		600
(400 shares X \$1.50)		

(c)

Cash	14,949	
Gain on Sale of Investments.....		1,617
Other Investments		13,332
\$15,100 – (\$15,100 X 0.01) = \$14,949		

BRIEF EXERCISE 9-4

(a)

Bond Discount Amortization Table
8% Bonds Sold to Yield a 10% Return

Date	Cash Received (8%)	Interest Income (10%)	Bond Discount Amortization	Amortized Cost of Bond
Day 1				\$ 95.03
End Year 1	\$8.00	\$9.50*	\$1.50	96.53
End Year 2	8.00	9.65	1.65	98.18
End Year 3	<u>8.00</u>	<u>9.82</u>	<u>1.82</u>	100.00
	<u>\$24.00</u>	<u>\$28.97</u>	<u>\$4.97</u>	

*\$95.03 X .10

(b) Bond Investment at Amortized Cost.....	95.03	
Cash.....		95.03
End of Year 1		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.50	
Interest Income.....		9.00
End of Year 2		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.65	
Interest Income.....		9.65

BRIEF EXERCISE 9-4 (Continued)

End of Year 3		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.82	
Interest Income.....		9.82
Cash.....	100.00	
Bond Investment at Amortized Cost.....		100.00
(c) Discount on bond when purchased:		
$\$100.00 - \$95.03 = \$4.97$		
Straight line discount amortization each year:		
$\$4.97 \div 3 \text{ years} = \$1.66 \text{ each year}$		
(d) Bond Investment at Amortized Cost.....	95.03	
Cash.....		95.03
End of Year 1		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.66	
Interest Income.....		9.66
End of Year 2		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.66	
Interest Income.....		9.66
End of Year 3		
Cash.....	8.00	
Bond Investment at Amortized Cost.....	1.65	
Interest Income.....		9.65
Cash.....	100.00	
Bond Investment at Amortized Cost.....		100.00

BRIEF EXERCISE 9-4 (Continued)

(e) Total interest income:

Effective interest method $\$9.50 + \$9.65 + \$9.82 = \$28.97$

Straight line method $\$9.66 + \$9.66 + \$9.65 = \$28.97$

That is, they are the same in total.

BRIEF EXERCISE 9-5

(a)

Bond Premium Amortization Table
6% Bonds Sold to Yield a 4% Return

Date	Cash Received (6%)	Interest Income (4%)	Bond Premium Amortization	Amortized Cost of Bond
Day 1				\$ 105.55
End Year 1	\$6.00	\$4.22*	\$1.78	103.77
End Year 2	6.00	4.15	1.85	101.92
End Year 3	<u>6.00</u>	<u>4.08</u>	<u>1.92</u>	100.00
	<u>\$18.00</u>	<u>\$12.45</u>	<u>\$5.55</u>	

*\$105.55 X .04

BRIEF EXERCISE 9-5 (Continued)

(b) Bond Investment at Amortized Cost.....	105.55	
Cash.....		105.55
End of Year 1		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.78
Interest Income.....		4.22
End of Year 2		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.85
Interest Income.....		4.15
End of Year 3		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.92
Interest Income.....		4.08
Cash.....	100.00	
Bond Investment at Amortized Cost.....		100.00
(c) Premium on bond when purchased:		
\$105.55 – \$100.00 = \$5.55		
Straight line premium amortization each year:		
\$5.55 ÷ 3 years = \$1.85 each year		
(d) Bond Investment at Amortized Cost.....	105.55	
Cash.....		105.55
End of Year 1		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.85
Interest Income.....		4.15

BRIEF EXERCISE 9-5 (Continued)

End of Year 2		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.85
Interest Income.....		4.15
End of Year 3		
Cash.....	6.00	
Bond Investment at Amortized Cost.....		1.85
Interest Income.....		4.15
Cash.....	100.00	
Bond Investment at Amortized Cost.....		100.00

(e)Total interest income:

Effective interest method $\$4.22 + \$4.15 + \$4.08 = \$12.45$

Straight line method $\$4.15 + \$4.15 + \$4.15 = \$12.45$

That is, they are the same in total.

BRIEF EXERCISE 9-6

(a) Bond Investment at Amortized Cost	55,133	
Cash		55,133
 Cash (\$60,000 X 6% X 6/12).....	1,800	
Bond Investment at Amortized Cost	405	
Interest Income.....		2,205
(\$55,133 X 8% X 6/12 = \$2,205)		
 Cash (\$60,000 X 6% X 6/12).....	1,800	
Bond Investment at Amortized Cost	422	
Interest Income.....		2,222
([\$55,133 + \$405] X 8% X 6/12 = \$2,222)		
 (b) Discount on bond when purchased:		
\$60,000 - \$55,133 = \$4,867		
Interest periods to maturity: 5 X 2 = 10		
Amortization each interest period: \$4,867 ÷ 10 = \$487		
 Bond Investment at Amortized Cost	55,133	
Cash		55,133
 Cash (\$60,000 X 6% X 6/12).....	1,800	
Bond Investment at Amortized Cost	487	
Interest Income.....		2,287
 Cash (\$60,000 X 6% X 6/12).....	1,800	
Bond Investment at Amortized Cost	487	
Interest Income.....		2,287

BRIEF EXERCISE 9-7

(a) September 1

Bond Investment at Amortized Cost.....	74,086	
Cash		74,086

(b) December 31

Interest Receivable (\$80,000 X 9% X 4/12).....	2,400	
Bond Investment at Amortized Cost.....	316	
Interest Income.....		2,716
(\$74,086 X 11% X 4/12)		

(c) March 1

Cash (\$80,000 X 9% X 6/12)	3,600	
Bond Investment at Amortized Cost.....	158	
Interest Receivable.....		2,400
Interest Income.....		1,358
(\$74,086 X 11% X 2/12 = \$1,358)		

(d) March 1

Cash.....	75,100	
Gain on Sale of Investments		540
Bond Investment at Amortized Cost		
(\$74,086 + \$316 + \$158)		74,560

BRIEF EXERCISE 9-8

(a) September 8

FV-NI Investments	13,200	
Cash		13,200

(b)

Cash	700	
Dividend Revenue		700
(400 shares X \$1.75)		

(c)

FV-NI Investments	1,000	
Unrealized Gain or Loss		1,000
[(400 X \$35.50) = \$14,200 – \$13,200]		

(d)

Cash (\$34.95 X 400 shares).....	13,980	
Loss on Sale of Investments.....	220	700
FV-NI Investments		14,200

BRIEF EXERCISE 9-9

(a)

FV-NI Investments.....	1,044.00	
Cash (\$1,000 X 1.044).....		1,044.00

(b)

Interest Receivable	17.50	
Investment Income or Loss		17.50
(7% X \$1,000 X 3/12)		

(c)

FV-NI Investments	11.00	
Investment Income or Loss		11.00
(\$1,055 - \$1,044)		

(d)

Interest Receivable (7% X \$1,000 X 3/12)	17.50	
FV-NI Investments		1.84
Interest Income (6% X \$1,044 X 3/12)		15.66

(e)

FV-NI Investments	12.84	
Unrealized Gain or Loss		12.84
\$1,055 – (\$1,044 – \$1.84)		

BRIEF EXERCISE 9-10

(a)

FV-NI Investments	970	
Interest Receivable	10	
Cash		980

(b)

Interest Receivable	45	
Investment Income or Loss.....		45

\$1,000 X 6% X 9/12

Investment Income or Loss	7	
FV-NI Investments		7

(\$970 - \$963)

(c)

Cash (\$1,000 X 6% X 12/12)	60	
Interest Receivable (\$10 + \$45)		55
Investment Income or Loss		5

(d)

Cash	961	
Investment Income or Loss	2	
FV-NI Investments		963

BRIEF EXERCISE 9-11

(a) FV-OCI Investments.....	23,400	
Cash		23,400
(b) Cash (\$3.25 per share X 300 shares).....	975	
Dividend Revenue		975
(c) Unrealized Gain or Loss - OCI	1,050	
FV-OCI Investments		1,050
(\$74.50 X 300 shares) = \$22,350 – \$23,400 = \$1,050		

BRIEF EXERCISE 9-12

(a)

FV-OCI Investments	263,600	
Cash		263,600
(10,000 X \$26.18) + \$1,800		

(b)

Cash (\$1.02 X 10,000).....	10,200	
Dividend Revenue		10,200

(c)

FV-OCI Investments	7,900	
Unrealized Gain or Loss – OCI		7,900
(\$271,500 - \$263,600)		

(d)

Gross selling price: 10,000 X \$28.10 =	\$281,000	
Less brokerage costs	<u>(1,925)</u>	
Proceeds from sale	279,075	
Carrying amount of shares	<u>(271,500)</u>	
Additional holding gain on shares	<u>\$ 7,575</u>	

FV-OCI Investments	7,575	
Unrealized Gain or Loss – OCI		7,575

Cash	279,075	
FV-OCI Investments		279,075

Unrealized Gain or Loss – OCI	15,475	
Gain on Sale of Investments		15,475
(\$7,900 + \$7,575)		

BRIEF EXERCISE 9-13

Gross selling price: 10,000 X \$28.10 =	\$281,000	
Less brokerage costs	<u>(1,925)</u>	
Proceeds from sale	279,075	
Carrying amount of shares	<u>(271,500)</u>	
Additional holding gain on shares	<u>\$ 7,575</u>	
 FV-OCI Investments	 7,575	
Unrealized Gain or Loss – OCI		7,575
 Cash	 279,075	
FV-OCI Investments		279,075
 Unrealized Gain or Loss – OCI	 15,475	
Retained Earnings		15,475
(\$7,900 + \$7,575)		

BRIEF EXERCISE 9-14

- (a) Other comprehensive income (loss) for 2014: \$(20,830)
- (b) Comprehensive income for 2014: \$651,853 or (\$672,683 – \$20,830)
- (c) Accumulated other comprehensive income, December 31, 2014: \$16,443 or (\$37,273 – \$20,830)

BRIEF EXERCISE 9-15

- (a) ASPE:** 1, 2
- (b) IFRS (IAS 39):** 1, 2, 3
- (c) IFRS (IFRS 9):** 1, 2, 4

BRIEF EXERCISE 9-16

- (a) ASPE:** Incurred loss model – for all investments measured using the cost/amortized cost method.
Fair value model – for equity investments with active market prices and derivatives.
- (b) IFRS (IAS 39):** Incurred loss model – for all investments measured using the cost/amortized cost method; and for FV-OCI investments when a loss or trigger event has occurred.
Fair value model – for all FV-NI measured investments.
- (c) IFRS (IFRS 9):** Incurred loss model – for all investments measured using the cost/amortized cost method.
Fair value model – likely for all investments measured at fair value.

BRIEF EXERCISE 9-17

(a)			
2014	Loss on Impairment	9	
	Bond Investment at Amortized		
	Cost		9
	\$100 minus higher of the discounted cash flow using current market rate and its NRV: \$100 - \$91 = \$9		
2015	Bond Investment at Amortized Cost.....	9	
	Recovery of Loss from Impairment		9
(b)			
2014	Loss on Impairment	10	
	Bond Investment at Amortized		
	Cost		10
2015	Bond Investment at Amortized Cost	10	
	Recovery of Loss from Impairment		10
(c)			
2014	Loss on Impairment	10	
	Bond Investment at Amortized		
	Cost		10
2015	Bond Investment at Amortized Cost	10	
	Recovery of Loss from Impairment		10

BRIEF EXERCISE 9-18

Investment in Associate.	100	
Cash.....		100
Investment in Associate.	6	
Investment Income or Loss		6
(40% X \$15)		
Cash	2	
Investment in Associate.....		2
(40% X \$5)		

BRIEF EXERCISE 9-19

January 2		
Investment in Associate	1,000	
Cash.....		1,000
Cost of 25% investment in Krov Corp. shares		\$1,000
25% of Krov Corp.'s carrying amount (25% X \$3,600)		<u>900</u>
Payment in excess of book value of Krov Corp....		100
Fair value allocation to unrecorded intangibles ...		<u>(100)</u>
Goodwill (unexplained excess)		<u>\$ 0</u>
Annual amortization of excess payment for unrecorded intangibles:		
\$100 ÷ 20 year remaining life = \$5 per year		
Dividend received from associate:		
Cash (\$12 X 25%).....	3	
Investment in Associate.....		3
Julip's share of associate's net income:		
Investment in Associate.....	15	
Investment Income or Loss (\$60 X 25%)		15
Amortization of Krov's unrecognized intangible assets:		
Investment Income or Loss	5	
Investment in Associate		5

BRIEF EXERCISE 9-20

(a) Significant Influence Investments	1,000	
Cash		1,000
Cash (\$12 X 25%)	3	
Dividend Revenue		3
Significant Influence Investments	20	
Unrealized Gain or Loss		20
(\$1,020 - \$1,000)		
(b) Significant Influence Investments	1,000	
Cash		1,000
Cash (\$12 X 25%)	3	
Dividend Revenue		3

BRIEF EXERCISE 9-21

(a)

If Beckett acquires 40% of Kyla Corp.'s shares for \$1.6 million cash, and can exercise significant influence over Kyla's policies, Beckett's statement of financial position will be affected as follows:

A			L			SE		
+1.6M	Invest. in Associate							
-1.6M	Cash							
-0-	No net effect		-0-	No effect		-0-	No effect	

(b)

If Beckett acquires 60% of Kyla Corp.'s shares for \$2.4 million cash, and now controls Kyla's operations (Kyla is a subsidiary company), Beckett's consolidated statement of financial position will be affected as follows:

A			L			SE		
+10.0M	Due to Kyla's assets		+6.0M	Due to Kyla's liabilities		+1.6M	40% non-controlling interest in Kyla's net assets	
- 2.4M	Cash							
+ 7.6M			+6.0M			+1.6M		

BRIEF EXERCISE 9-22

The requirement to disclose both the carrying amount of each type of investment on the statement of financial position and the income statement amounts classified in a similar way allows the reader to assess how significant the financial asset investments are to an entity's financial position (total assets, net assets) and to its performance (net income, comprehensive income). In some enterprises (pension plans, insurance companies, etc.) these investments are very significant, whereas in others (most manufacturers, retail outlets, etc.) they do not contribute very much to the economic resource base of the entity or to its profitability.

Once the significance is known, a better risk assessment of the entity can be performed because financial asset investments tend to expose entities to specific types of financial risks.

SOLUTIONS TO EXERCISES

EXERCISE 9-1 (25-30 minutes)

	(a) ASPE	(b) IFRS (IAS 39)	(c) IFRS (IFRS 9)
1	Fair value through net income (FV-NI) security since the company's intent is to manage the changing fair values and sell the bonds as soon as the value increases. Fair value option would be applied.	Fair value through net income (FV-NI) security since this is held for trading.	Fair value through net income (FV-NI) security since the company's intent is to manage the changing fair values and sell the bonds as soon as the value increases.
2	If no active market prices are available for Farm Corp., then at cost; if active market prices are available, then at FV-NI. This will be reassessed if and when a more significant holding is achieved.	There is a choice between FV-NI and FV-OCI here. Management would probably choose the FV-OCI method because of the longer term strategic purpose for this investment. This would be classified as available-for-sale (even though the shares were not acquired for sale!).	Fair value through other comprehensive income (FV-OCI) security. When the company acquires 20% or more, the investment will be reclassified to an equity investment if significant influence over Farm Corp. exists.
3	Amortized cost, unless the company chooses the fair value through net income (FV-NI) model option. With such a short maturity, its cost plus accrued interest will be representative of FV in any case.	The fair value through net income (FV-NI) method is the best choice, although the investment's cost plus accrued interest is representative of its fair value.	The fair value through net income (FV-NI) method is the best choice, although the investment's cost plus accrued interest is representative of its fair value.

EXERCISE 9-1 (Continued)

	(a) ASPE	(b) IFRS (IAS 39)	(c) IFRS (IFRS 9)
4	Amortized cost should be used unless the intent is to manage them for capital appreciation or trading. If the latter, then choose the fair value through net income (FV-NI) method. (Private entity GAAP does not have an FV-OCI option.)	Under IAS 39, this investment cannot be classified as held to maturity using the amortized cost approach. The FV-NI option (held for trading) is likely to be chosen.	All assets are open to being sold if cash is needed. If the entity does manage the bonds for their cash flows of principal and interest, then amortized cost should be used. They are not being held as trading securities, so FV-NI is not appropriate. (Under proposed IFRS 9, FV-OCI investments normally will be limited to equity investments in other companies.)
5	Amortized cost appears to be the best choice here based on the purpose of the investment.	With an intent and capability of holding this investment to maturity, the entity would likely choose the amortized cost approach.	Amortized cost method as the company's intent is to manage the stated cash flows and hold the bonds until maturity.
6	Fair value through net income (FV-NI) assuming that the equity investment is quoted in an active market and managed based on its dividend yield on market value. If not quoted in an active market, then the cost method should be used.	Fair value through OCI (available for sale). Management is most interested in the yield earned on the market value of the shares which would flow through net income, but the intent is to hold the investment for the long term rather than convert it to cash in the short or medium term. The FV changes would be better going through OCI therefore.	FV-NI unless the company chooses to use FV-OCI (which they are allowed to do as an accounting policy choice). Since the shares are not held for trading, it might not make sense to include them in the FV-NI category.

EXERCISE 9-1 (Continued)

	(a)ASPE	(b) IFRS (IAS 39)	(c)IFRS (IFRS 9)
7	The FV of the shares is not likely a factor; they are held only to permit business to be conducted. The cost method is the best choice as the shares are not held for possible conversion to cash.	Because the shares are not held for cash flows consisting of principal and interest, the shares should be fair valued. Since they are held for longer term strategic purposes, the entity would probably choose the FV-OCI approach, that is available for sale.	Because the shares are not held for cash flows consisting of principal and interest, the shares should be fair valued. Since they are held for longer term strategic purposes, the entity would probably choose the FV-OCI approach.

EXERCISE 9-2 (10-15 minutes)

(a) January 1, 2014			
	Bond Investment at Amortized Cost	300,000	
	Cash		300,000
(b) December 31, 2014			
	Cash	30,000	
	Interest Income		30,000
(c) December 31, 2015			
	Cash	30,000	
	Interest Income		30,000
(d) January 1, 2019			
	Cash	300,000	
	Bond Investment at Amortized Cost...		300,000

EXERCISE 9-3 (25-30 minutes)

(a) **January 1, 2014**

Bond Investment at Amortized Cost	537,907.40
Cash	537,907.40

(b) **Schedule of Interest Income
and Bond Premium Amortization
Effective Interest Method
12% Bonds Sold to Yield 10%**

<u>Date</u>	<u>Cash Received</u>	<u>Interest Income</u>	<u>Premium Amorti- zation</u>	<u>Carrying Amount of Bonds</u>
01/01/14	—	—	—	\$537,907.40
12/31/14	\$60,000	\$53,790.74	\$6,209.26	531,698.14
12/31/15	60,000	53,169.81	6,830.19	524,867.95
12/31/16	60,000	52,486.80	7,513.20	517,354.75
12/31/17	60,000	51,735.48	8,264.52	509,090.23
12/31/18	60,000	50,909.77*	9,090.23*	500,000.00
	\$300,000	\$262,092.60	\$37,907.40	

*Adjusted due to rounding.

(c) **December 31, 2014**

Cash.....	60,000.00
Bond Investment at Amortized Cost...	6,209.26
Interest Income.....	53,790.74

(d) **December 31, 2015**

Cash.....	60,000.00
Bond Investment at Amortized Cost...	6,830.19
Interest Income.....	53,169.81

(e) **January 1, 2019**

Cash.....	500,000.00
Bond Investment at Amortized Cost	500,000.00

EXERCISE 9-3 (Continued)

(6)	Cost of bond when acquired	\$537,907.40
	Face value of bond (maturity value)	<u>500,000.00</u>
	Premium to be amortized	<u>\$ 37,907.40</u>
	Number of interest periods = 5	
	Premium to be amortized each year:	
	$\$37,907.40 \div 5 = \$7,581.48$	

Cash.....	60,000.00
Bond Investment at Amortized Cost...	7,581.48
Interest Income.....	52,418.52

(7)	Total interest income, effective interest method	
	Part (b) above:	\$262,092.60
	Part (f) above:	
	$\$52,418.52 \times 5 =$	\$262,092.60

Conclusion: the two methods result in the same amount of total interest income because the cash flows and the premium amount are the same in both cases. The two methods differ only in the timing of interest income recognition.

- (8) Under the effective interest method, the interest income reported when compared with the investment's carrying amount always corresponds to the rate the bond was purchased to yield, and it is the same rate and relationship each year. This is what an investor would expect to see – as the investment carrying amount is reduced, so is the amount of interest income.

Under the straight line method, the interest income reported each year stays the same, even though the investment's carrying amount changes (in this case, the carrying amount is reduced each period). This makes it appear that the interest income is at a higher yield each period. This is not the economic reality.

EXERCISE 9-4 (20-25 minutes)

**(a) Schedule of Interest Income
and Bond Discount Amortization
Effective Interest Method
9% Bond Purchased to Yield 12%**

<u>Date</u>	<u>Cash Received</u>	<u>Interest Income</u>	<u>Bond Discount Amortization</u>	<u>Carrying Amount of Bonds</u>
01/01/14	—	—	—	\$278,384
12/31/14	\$27,000	\$33,406*	\$6,406	284,789
12/31/15	27,000	34,175	7,175	291,964
12/31/16	27,000	35,036	8,036	300,000
*\$278,384 X .12 = \$33,406				

(b) December 31, 2015

Cash.....	27,000	
Bond Investment at Amortized Cost	7,175	
Interest Income.....		34,175

(c) December 31, 2016

Cash.....	27,000	
Bond Investment at Amortized Cost	8,036	
Interest Income.....		35,036
Cash.....	300,000	
Bond Investment at Amortized Cost		300,000

Alternatively, the entries could be combined in one compound entry:

Cash.....	327,000	
Interest Income.....		35,036
Bond Investment at Amortized Cost		291,964

EXERCISE 9-4 (Continued)

(d)	Cash	285,270	
	Loss on Sale of Investments	6,694	
	Bond Investment at Amortized Cost		291,964

EXERCISE 9-5 (15-20 minutes)

(a)

FV-NI Investments	537,907.40	
Cash		537,907.40

(b)

December 31, 2014

Cash	60,000.00	
FV-NI Investments		6,209.26
Interest Income		53,790.74

FV-NI Investments	2,501.86	
Unrealized Gain or Loss		2,501.86
\$534,200 – (\$537,907.40 - \$6,209.26)		
= \$534,200 - \$531,698.14 = \$2,501.86		

December 31, 2015

Cash	60,000.00	
FV-NI Investments		6,830.19
Interest Income		53,169.81

Unrealized Gain or Loss	12,369.81	
FV-NI Investments		12,369.81
(\$534,200 – \$6,830.19) - \$515,000		
= \$527,369.81 - \$515,000 = \$12,369.81		

EXERCISE 9-5 (Continued)

FV-NI Investments	5,513.20	
Unrealized Gain or Loss		5,513.20
\$513,000 – (\$515,000 - \$7,513.20)		
= \$513,000 - \$507,486.80 = \$5,513.20		

December 31, 2016		
Cash	60,000.00	
FV-NI Investments		7,513.20
Interest Income		52,486.80

(c)

Assuming no change in the credit rating of the company that issued the bond, it appears that market rates increased rather than decreased. Market prices of bonds fall when interest rates rise, and prices of bonds rise when interest rates fall. However, part of the decrease in fair value of this bond is due to the reduction in time to maturity.

EXERCISE 9-6 (25-30)

(a)

February 1

FV-NI Investments	300,000	
Interest Receivable	10,000	
Cash		310,000
$\$300,000 \times 10\% \times 4/12 = \$10,000$		

April 1

Cash	15,000	
Interest Receivable		10,000
Investment Income or Loss		5,000
$\$300,000 \times 10\% \times 6/12 = \$15,000$		

June 15

FV-NI Investments	200,000	
Interest Receivable	750	
Cash		200,750
$\$200,000 \times 9\% \times \frac{1}{2} / 12 = \$750$		

August 31

Cash	61,900	
Investment Income or Loss.....	600	
Investment Income or Loss		2,500
FV-NI Investments		60,000
Loss = $\$60,000 - (\$60,000 \times .99)$		
Cash = $(\$60,000 \times .99)$ for the bonds		
and $(\$60,000 \times 10\% \times 5/12)$ for interest		

October 1

Cash	12,000	
Investment Income or Loss.....		12,000
$(\$300,000 - \$60,000) \times 10\% \times 6/12$		

EXERCISE 9-6 (Continued)

December 1		
Cash	9,000	
Interest Receivable		750
Investment Income or Loss		8,250
$\$200,000 \times 9\% \times 6/12 = \$9,000$		

December 31		
Interest Receivable	7,500	
Investment Income or Loss		7,500
Accrued interest to Dec. 31:		
Gibbons: $\$240,000 \times 10\% \times 3/12 =$	\$6,000	
Sampson: $\$200,000 \times 9\% \times 1/12 =$	<u>1,500</u>	
	<u>\$7,500</u>	

December 31	Carrying Amount	Fair Value
Gibbons bonds	\$240,000	\$236,400
Sampson bonds	<u>200,000</u>	<u>202,000</u>
	<u>\$440,000</u>	<u>\$438,400</u>
Investment Income or Loss	1,600	
FV-NI Investments		1,600
(\$440,000 - \$438,400)		

(b)

February 1		
Bond Investment at Amortized Cost.....	300,000	
Interest Receivable	10,000	
Cash		310,000
$\$300,000 \times 10\% \times 4/12 = \$10,000$		

EXERCISE 9-6 (Continued)

April 1

Cash	15,000	
Interest Receivable		10,000
Interest Income		5,000
$\$300,000 \times 10\% \times 6/12 = \$15,000$		

June 15

Bond Investment at Amortized Cost ..	200,000	
Interest Receivable	750	
Cash		200,750
$\$200,000 \times 9\% \times \frac{1}{2} / 12 = \$750$		

August 31

Cash	61,900	
Loss on Sale of Investments	600	
Interest Income		2,500
Bond Investment at Amortized Cost		60,000
Loss = $\$60,000 - (\$60,000 \times .99)$		
Cash = $(\$60,000 \times .99)$ for the bonds		
and $(\$60,000 \times 10\% \times 5/12)$ for interest		

October 1

Cash	12,000	
Interest Income.....		12,000
$(\$300,000 - \$60,000) \times 10\% \times 6/12$		

December 1

Cash	9,000	
Interest Receivable		750
Interest Income		8,250
$\$200,000 \times 9\% \times 6/12 = \$9,000$		

EXERCISE 9-6 (Continued)

December 31		
Interest Receivable	7,500	
Interest Income		7,500
Accrued interest to Dec. 31:		
Gibbons: \$240,000 X 10% X 3/12 =	\$6,000	
Sampson: \$200,000 X 9% X 1/12 =	<u>1,500</u>	
	<u>\$7,500</u>	

(c)

When an entity manages its investments on the basis of yield to maturity, it means management intends to hold the bonds until they mature. Their business plans include the cash flows from interest receipts and the principal when the bond matures.

The bonds are acquired at a price to yield a specific rate and it is this rate of interest that management expects to report on the income statement each period.

Because management does not intend to trade these bonds in the market, remeasuring them to their fair value at each reporting date is not relevant information to users of the financial statements.

EXERCISE 9-7 (10-15)

(a)

Investment Income or Loss	1,400	
FV-NI Investments		1,400
(\$50,000 – \$48,600)		

(b)

Cash	9,500	
Investment Income or Loss		500
FV-NI Investments		9,000

(c)

Securities	Carrying Amount	Fair Value
Moonstar Corp. shares	\$19,000	\$19,300
Radius Ltd. shares	<u>20,600</u>	<u>20,500</u>
Total of portfolio	<u>\$39,600</u>	<u>\$39,800</u>
Adjustment needed to bring portfolio to fair value		\$200 Dr
FV-NI Investments	200	
Investment Income or Loss		200

EXERCISE 9-8 (25-30 minutes)

(a)

August 31, 2013

FV-NI Investments	104,490	
Interest Receivable (\$100,000 X 9% X 10/12)...	7,500	
Cash		111,990

November 1, 2013

Cash	9,000	
Interest Receivable		7,500
Investment Income or Loss		1,500

December 31, 2013

Interest Receivable (\$100,000 X 9% X 2/12).....	1,500	
Investment Income or Loss		1,500

Investment Income or Loss	1,290	
FV-NI Investments		1,290
(\$104,490 – \$103,200)		

January 15, 2014

Cash	104,775	
Investment Income or Loss		75
Interest Receivable		1,500
FV-NI Investments		103,200

Investment income: \$375 - \$300 = \$75

Selling Price of bonds	\$102,900
Interest since last interest payment	
(\$100,000 X 9% X 2.5/12)	<u>1,875</u>
Cash received from purchaser	<u>104,775</u>

Interest since last interest payment	1,875
Interest accrued at December 31	<u>1,500</u>
Additional interest accrued to date of sale	<u>375</u>

EXERCISE 9-8 (Continued)

Selling price of bonds	102,900
Carrying amount of bonds	<u>103,200</u>
Holding loss on sale of bond	<u>300</u>

- (b) For 2013, the number of months the bond was held is: August 31 to December 31 = 4 months. The amount of interest earned and reported on the income statement should be $\$100,000 \times 9\% \times 4/12 = \$3,000$. The amount actually reported is $(\$1,500 + \$1,500 - \$1,290 = \$1,710)$. The difference is caused by the fair value adjustment of \$1,290 at year-end. The Investment Income or Loss account includes both interest income and fair value adjustments.
- (c) IFRS 7 *Financial Instruments: Disclosures* indicates in paragraph B5(e) that entities may disclose whether the net gains or losses on financial assets measured at fair value through profit or loss (i.e., FV-NI) and reported on the income statement include interest and dividend income. Private entity GAAP, on the other hand, requires separate reporting of interest income and net gains or losses recognized on financial instruments (*CICA Handbook, Part II, Accounting Standards for Private Enterprises, Section 3856.52*).
- (d) The overall income earned from the investment was \$1,785 calculated as follows:

Interest purchased Aug. 31, 2013	\$(7,500)
Interest received Nov. 1, 2013	9,000
Interest accrued Dec. 31, 2013	1,500
Interest Income to Jan. 15, 2014	<u>375</u>
Total Interest Income	<u>3,375</u>

EXERCISE 9-8 (Continued)

Unrealized loss at Dec. 31, 2013	1,290
Realized loss recorded Jan. 2014	<u>300</u>
	<u>1,590</u>
Net income overall	<u><u>\$1,785</u></u>

Alternatively:

Cash out:
August 31, 2013 \$111,990

Cash in:

November 1, 2013	\$ 9,000	
January 15, 2014	<u>104,775</u>	<u>113,775</u>

Net positive return \$ 1,785

This return represents a 4.56% annual return on the investment $[(\$1,785 / 4.5 \text{ months} \times 12) / \$104,490]$. The company earns a return on excess funds if the return on the bond investment exceeds the interest rate on its savings account. The actual return of 4.56% is lower than the bond's stated rate of 9% since the company had purchased the bond at a premium and since it incurred a loss on the market value of the bond at resale that offset the interest earned while the bond was held.

EXERCISE 9-9 (15-20 minutes)

(a)

Investment Income or Loss	5,900	
FV-NI Investments.....		5,900
(\$311,500 – \$305,600)		

(b)

Cash	67,000*	
Investment Income or Loss	2,000	
FV-NI Investments		69,000
*(1,500 X \$45) – \$500		

(c)

FV-NI Investments (700 X \$75)	52,500	
Investment Income or Loss	1,300	
Cash		53,800

(d) <u>Securities</u>	<u>Carrying Amount</u>	<u>Fair Value</u>
Hearn Corp., Common	\$175,000	\$175,000
Oberto Ltd., Common	52,500	50,400
Alessandro Inc., Preferred	61,600	58,000
Total portfolio	<u>\$289,100</u>	<u>\$283,400</u>
Adjustment needed - credit		<u>\$5,700 Cr</u>

Investment Income or Loss	5,700	
FV-NI Investments		5,700

EXERCISE 9-10 (10-15 minutes)

(a) FV-NI Investments	3,000	
Investment Income or Loss		3,000

(b) FV-OCI Investments.....	3,000	
Unrealized Gain or Loss- OCI.....		3,000

Note: Each investment could also be adjusted separately.

- (c) The holding gain on the investments accounted for using the fair value through net income (FV-NI) model is reported as part of investment income/loss in the income statement under Other Revenues and Gains, and this account is subsequently closed out to retained earnings at the end of the period. The holding gain or loss for investments accounted for using the fair value through other comprehensive income (FV-OCI) model is reported as a part of other comprehensive income and is closed out to accumulated other comprehensive income (AOCI) at the end of the period. Both the FV-OCI and FV-NI securities are reported at fair value on the balance sheet.
- (d) The accounting for FV-NI investments and FV-OCI investments under IAS 39 and IFRS 9 is very similar relative to the entries above. However, IFRS 9 does not use the FV-OCI as a default category as IAS 39 does, but instead restricts which equity investments should be classified as such.

EXERCISE 9-11 (20-30 minutes)

(a)

January 15, 2014		
FV-NI Investments (9,000 X \$33.50)	301,500	
Investment Income or Loss	1,980	
Cash		303,480

April 1, 2014		
FV-NI Investments (5,000 X \$52.00)	260,000	
Investment Income or Loss	3,370	
Cash		263,370

September 10, 2014		
FV-NI Investments (7,000 X \$26.50)	185,500	
Investment Income or Loss	2,910	
Cash		188,410

(b)

May 20, 2014		
Cash [(3,000 X \$35) – \$2,850]	102,150	
FV-NI Investments*		100,500
Investment Income or Loss**		1,650
*(3,000/9,000 X \$301,500)		
** Gain on sale of shares: (3,000 X \$35) - \$100,500 = \$4,500		
Transaction costs expensed		<u>(2,850)</u>
Net investment income		<u>\$1,650</u>

(c) <u>Shares</u>	<u>Cost</u>	<u>Fair Value</u>
Nirmala Corp. (6,000 shares)	\$201,000	\$180,000
Oxana Corp. (5,000 shares)	260,000	275,000
WTA Corp. (7,000 shares)	<u>185,500</u>	<u>196,000</u>
Total portfolio	<u>\$646,500</u>	<u>\$651,000</u>

December 31, 2014		
FV-NI Investments	4,500	
Investment Income or Loss		4,500

EXERCISE 9-11 (Continued)

(d) The total purchase price of these investments is:

Nirmala:	$(9,000 \times \$33.50) + \$1,980 = \$303,480$
Oxana:	$(5,000 \times \$52.00) + \$3,370 = \$263,370$
WTA:	$(7,000 \times \$26.50) + \$2,910 = \$188,410$

The purchase entries will be:

January 15, 2014		
FV-OCI Investments.....	303,480	
Cash		303,480

April 1, 2014		
FV-OCI Investments.....	263,370	
Cash		263,370

September 10, 2014		
FV-OCI Investments.....	188,410	
Cash		188,410

May 20, 2014		
FV-OCI Investments*	990	
Unrealized Gain or Loss - OCI.....		990

Cash $[(3,000 \times \$35) - \$2,850]$	102,150	
FV-OCI Investments		102,150

Unrealized Gain or Loss - OCI	990	
Gain on Sale of Investments		990

*Gross selling price of 3,000 shares at \$35	\$105,000
Less: Brokerage commissions	<u>(2,850)</u>
Net proceeds from sale	102,150
Carrying amount of 3,000 shares	
$(\$303,480 \times 3,000/9,000)$	<u>(101,160)</u>
Gain on sale of shares	<u>\$ 990</u>

EXERCISE 9-11 (Continued)

December 31, 2014		
Unrealized Gain or Loss - OCI	3,100	
FV-OCI Investments		3,100

Note: It would also be appropriate to make separate entries for each investment.

<u>Shares</u>	<u>Carrying Amount</u>	<u>Fair Value</u>	<u>Unrealized Gain (Loss)</u>
Nirmala Corp., 6,000 shs	\$202,320*	\$180,000	\$(22,320)
Oxana Corp., 5,000 shs	263,370	275,000	11,630
WTA Corp., 7,000 shs	<u>188,410</u>	<u>196,000</u>	<u>7,590</u>
Total portfolio	<u>\$654,100</u>	<u>\$651,000</u>	<u>(3,100)</u>

$$*\$303,480 + \$990 - \$102,150 = \$202,320$$

- (e) IFRS 9 does not support the use of FV-OCI as a default measurement category, so some or all of these investments may not meet the criteria to be measured at FV-OCI.

IFRS also does not support recycling. If the FV-OCI method were allowed for these investments, the gain realized on the Nirmala shares sold would be transferred directly to Retained Earnings instead of being recognized in 2014's net income, as follows:

Unrealized Gain or Loss - OCI	990	
Retained Earnings.....		990

EXERCISE 9-12 (25-30 minutes)

(a) December 31, 2014

Unrealized Gain or Loss - OCI	3,600	
FV-OCI Investments		3,600
(It is also acceptable to prepare a separate entry for each investment.)		

(b)

Wang Inc. Statement of Financial Position December 31, 2014

Non-current Assets:

Investments in equity securities, FV-OCI	\$366,100

Shareholders' Equity:

Accumulated Other Comprehensive Income	
Unrealized losses on FV-OCI investments	(\$ 3,600)

(c)

Statement of Comprehensive Income

Net income

(including dividend income on equity investments) \$ xxx

Other Comprehensive Income

Item that will not be reclassified to net income:

Unrealized net loss on FV-OCI investments	(3,600)
Comprehensive Income	<u>\$xxx – 3,600</u>

(d)

January 20, 2015

FV-OCI Investments.....	3,300	
Unrealized Gain or Loss - OCI.....		3,300
Cash.....	153,300	
FV-OCI Investments		153,300

EXERCISE 9-12 (Continued)

Retained Earnings.....	21,900
Unrealized Gain or Loss - OCI.....	21,900
(\$175,200 cost less \$153,300 cash proceeds on sale =	
\$21,900 loss transferred out of AOCI directly to Retained	
Earnings)	

June 2015	
Cash.....	1,300
Dividend Revenue	1,300

(e) December 31, 2015

Investments	Carrying Amount	Fair Value	Holding Gain (Loss)
Burnham Corp. shares	\$140,600	\$153,750	\$13,150
Chi Ltd. shares	<u>75,500</u>	<u>72,600</u>	<u>(2,900)</u>
Total of portfolio	<u>\$216,100</u>	<u>\$226,350</u>	<u>\$10,250</u>

FV-OCI Investments.....	10,250
Unrealized Gain or Loss - OCI.....	10,250
(Note: it would be equally correct to make a separate entry for each investment.)	

EXERCISE 9-13 (15-20 minutes)

(a)

December 31, 2014

FV-OCI Investments.....	1,850	
Unrealized Gain or Loss - OCI.....		1,850

December 31, 2015

Unrealized Gain or Loss - OCI	9,550	
FV-OCI Investments		9,550

December 31, 2016

FV-OCI Investments.....	4,200	
Unrealized Gain or Loss - OCI.....		4,200

(b)

	Dec. 31/14	Dec. 31/15	Dec. 31/16
Fair value of FV-OCI investments	\$41,750	\$32,200	\$36,400
Original cost of FV-OCI investments	<u>39,900</u>	<u>39,900</u>	<u>39,900</u>
Balance in accumulated other comprehensive income	<u>\$ 1,850</u>	<u>\$(7,700)</u>	<u>\$(3,500)</u>
Proof of balance:			
Entry, Dec. 31/14	\$ 1,850	\$ 1,850	\$ 1,850
Entry, Dec. 31/15	-0-	(9,550)	(9,550)
Entry, Dec. 31/16	<u>-0-</u>	<u>-0-</u>	<u>4,200</u>
Balance at year end	<u>\$ 1,850</u>	<u>\$(7,700)</u>	<u>\$(3,500)</u>

EXERCISE 9-13 (Continued)

(c)

February 13, 2017

FV-OCI Investments.....	1,600	
 Unrealized Gain or Loss - OCI.....		1,600
(\$38,000 - \$36,400)		

Cash.....	38,000	
 FV-OCI Investments		38,000

(1) **With recycling**

Loss on sale of Investments	1,900	
 Unrealized Gain or Loss - OCI.....		1,900
(\$39,900 - \$38,000)		

(2) **Without recycling**

Retained Earnings	1,900	
 Unrealized Gain or Loss - OCI.....		1,900
(\$39,900 - \$38,000)		

EXERCISE 9-14 (30-35 minutes)

	Cost		FV-NI		FV-OCI	
(1)	Debit	Credit	Debit	Credit	Debit	Credit
Cash	4,500		4,500		4,500	
Dividend Revenue*		4,500		4,500		4,500
(5,000 X \$0.90)						
(2)						
\$15.50 X 5,000 = \$77,500 - \$68,750						
FV-NI Investments			8,750			
Unrealized Gain or Loss				8,750		
FV-OCI Investments					8,750	
Unrealized Gain or Loss - OCI						8,750
(3)						
Cash	4,500		4,500		4,500	
Dividend Revenue*		4,500		4,500		4,500
(4)						
\$17 X 5,000 = \$85,000 - \$77,500						
FV-NI Investments			7,500			
Unrealized Gain or Loss				7,500		
FV-OCI Investments					7,500	
Unrealized Gain or Loss - OCI						7,500

*This could be credited to Investment Income or Loss in the FV-NI columns

EXERCISE 9-14 (Continued)

(b)

	Cost	FV-NI	FV-OCI
(i)			
Effect on total assets, Dec. 31/14**			
Investments	+ \$ 68,750	+ \$ 77,500	+ \$ 77,500
Cash	+ \$4,500	+ \$4,500	+ \$4,500
(ii)			
Effect on 2014 net income	+ \$4,500		+ \$ 4,500
\$4,500 + \$8,750		+ \$ 13,250	
(iii)			
Effect on total assets, Dec. 31/15**			
Investments	+ \$ 68,750	+ \$ 85,000	+ \$ 85,000
Cash (\$9,000 on an accumulated basis)	+ \$ 4,500	+ \$ 4,500	+ \$ 4,500
(iv)			
Effect on 2015 net income	+ \$ 4,500		+ \$ 4,500
\$4,500 + \$7,500		+ \$ 12,000	

**Aside from the decrease in cash from the original purchase of the investment

(c)

	Cost	FV-NI	FV-OCI
\$17 X 5,000 shs. = \$85,000			
Gain reported in net income:			
\$85,000 - \$68,750	+\$16,250		
\$85,000 - \$85,000		\$ -0-	
			No effect – realized gain is transferred directly to R/E

EXERCISE 9-14 (Continued)

Note that the difference between the cost and FV-NI methods is one of timing. Under FV-NI measurement, the \$16,250 increase in value since acquisition was reported in net income in 2014 and 2015. Under the cost method, recognition of the increase in value is deferred until it is realized in 2016. Under the FV-OCI approach without recycling, the gain is recognized only in comprehensive income, never in net income. (If there is recycling, however, the full realized gain of \$16,250 is transferred to net income in the period realized – 2016.)

(d)

Under ASPE, the company would have to choose between the cost method and the FV-NI method.

The FV-NI method must be used for equity instruments that trade in an active market and therefore have an active market price, and for derivatives. It may be used if the company chooses to account for the investment at FV under the fair value option. This might be the situation if there is an accounting mismatch, for example. The cost/amortized cost method is used for all other investments.

EXERCISE 9-15 (20-25 minutes)

(a)

(1) December 31, 2014 entry:

Loss on Impairment.....	50,500	
Bond Investment at Amortized Cost		50,500
(\$788,000 – \$737,500)		

Under ASPE, the carrying amount is reduced to the higher of the discounted cash flow using a current market rate or the bond's net realizable value. This latter amount is not provided in this situation.

(2) December 31, 2015 entry:

Bond Investment at Amortized Cost	18,500	
Recovery of Loss from Impairment.....		18,500
(\$760,000 – \$741,500)		

(b) (1) December 31, 2014 entry:

Loss on Impairment.....	54,000	
Bond Investment at Amortized Cost		54,000
(\$788,000 – \$734,000)		

Under IAS 39, the carrying amount of a debt instrument is reduced to the discounted remaining estimated cash flows using the historic discount rate.

(2) December 31, 2015 entry:

Bond Investment at Amortized Cost	18,500	
Recovery of Loss from Impairment.....		18,500
(\$760,000 – \$741,500)		

(c)

(1) December 31, 2014 entry:

Loss on Impairment.....	54,000	
Bond Investment at Amortized Cost		54,000
(\$788,000 – \$734,000)		

Under IFRS 9, the carrying amount is reduced to the discounted cash flow using the historic discount rate.

EXERCISE 9-15 (Continued)

(2) December 31, 2015 entry:

Bond Investment at Amortized Cost	18,500	
Recovery of Loss from Impairment.....		18,500
(\$760,000 – \$741,500)		

(d)

(1) December 31, 2014 entry:

Loss on Impairment.....	50,500	
Allowance for Investment		
Impairment		50,500
(\$788,000 – \$737,500)		

The investment account remains at its current carrying amount and it is offset by the credit balance in the Allowance account.

(2) December 31, 2015 entry:

Allowance to Reduce Bond Investment for		
Impairment	18,500	
Recovery of Loss from Impairment.....		18,500
(\$760,000 – \$741,500)		

EXERCISE 9-16 (30-35 minutes)

(a)

Bond Amortization Table				
<u>Date</u>	<u>(12%) Cash Received</u>	<u>(10%) Interest Income</u>	<u>Premium Amorti- zation</u>	<u>Carrying Amount of Bonds</u>
01/01/12	—	—	—	\$322,744.44
12/31/12	\$36,000	\$32,274.44	\$3,725.56	319,018.88
12/31/13	36,000	31,901.89	4,098.11	314,920.77
12/31/14	36,000	31,492.08	4,507.92	310,412.85
12/31/15	36,000	31,041.29	4,958.71	305,454.14

January 1, 2012

FV-NI Investments	322,744.44	
Cash.....		322,744.44

December 31, 2012

Cash (12% X \$300,000)	36,000.00	
FV-NI Investments		3,725.56
Interest Income		32,274.44

FV-NI Investments	1,681.12	
Unrealized Gain or Loss		1,681.12

Carrying amount:

$\$322,744.44 - \$3,725.56 =$	$\$319,018.88$
FV at December 31	$= \underline{\underline{\$320,700.00}}$
FV adjustment, Dec. 31	$= \underline{\underline{\$1,681.12}}$

EXERCISE 9-16 (Continued)

(b)

December 31, 2013

Cash	36,000.00	
FV-NI Investments		4,098.11
Interest Income.....		31,901.89
Unrealized Gain or Loss	60,101.89	
FV-NI Investments		60,101.89
Carrying amount:		
\$320,700.00 - \$4,098.11 =	\$316,601.89	
FV at December 31:		
\$300,000 X .855	=	<u>256,500.00</u>
FV adjustment, Dec. 31	=	<u>\$ 60,101.89</u>

December 31, 2014

Cash	36,000.00	
FV-NI Investments		4,507.92
Interest Income.....		31,492.08
FV-NI Investments	9,007.92	
Unrealized Gain or Loss.....		9,007.92
Carrying amount:		
\$256,500 - \$4,507.92 =	\$251,992.08	
FV at December 31:		
\$300,000 X .87 =		<u>261,000.00</u>
FV adjustment, Dec. 31 =		<u>\$ 9,007.92</u>

EXERCISE 9-16 (Continued)

(c)

	December 31, 2015	
Cash	36,000.00	
FV-NI Investments		4,958.71
Interest Income		31,041.29
 FV-NI Investments	42,458.71	
Unrealized Gain or Loss		42,458.71
 Carrying amount:		
\$261,000 - \$4,958.71	=	\$256,041.29
FV at December 31:		
\$300,000 X .995	=	<u>298,500.00</u>
FV adjustment, Dec. 31	=	<u>\$ 42,458.71</u>

EXERCISE 9-16 (Continued)

(d)

Parts (a) to (c) use a fair value impairment model. That is, because the investments are re-measured to their FV at each year end, there is no need to calculate a separate impairment loss or recovery. If Mamood had accounted for this investment at amortized cost, the impairment model would change to an incurred loss model. When there is objective evidence that the expected future cash flows have been significantly reduced, an impairment loss is measured and recognized as follows:

- 1. IFRS and IAS 39. The loss is measured as the difference between the carrying amount and the present value of the revised expected cash flows, discounted at the historic discount rate.**
- 2. IFRS and IFRS 9. The loss is measured as the difference between the carrying amount and the present value of the revised expected cash flows, discounted at the historic discount rate.**
- 3. ASPE. The loss is measured as the difference between the carrying amount and higher of the present value of the revised expected cash flows, discounted at the current market discount rate and the estimated net realizable value of the investment.**

In all cases, the impairment losses are permitted to be reversed if the investment values increase.

EXERCISE 9-17 (35-40 minutes)

(a)

In Situation 1, IFRS and IAS 39 would use the incurred loss model

In Situation 2, IFRS and IAS 39 would use the fair value impairment model

In Situation 3, IFRS and IAS 39 would use the incurred loss model

(b)

IAS 39: Situation 1

December 31, 2013

No entry as there was no trigger or loss event in 2013.

December 31, 2014

Loss on Impairment	17,450	
Other Investments		17,450
(\$29,850 - \$12,400)		

IAS 39: Situation 2

December 31, 2013

Unrealized Gain or Loss	2,500	
FV-NI Investments		2,500
(\$29.00 - \$26.50) X 1,000 shares		

December 31, 2014

Unrealized Gain or Loss	15,400	
FV-NI Investments		15,400
(\$26.50 - \$11.10) X 1,000 shares = \$15,400		

IAS 39: Situation 3

December 31, 2013

Unrealized Gain or Loss - OCI	1,000	
FV-OCI Investments		1,000
(\$27,000 - \$26,000)		

EXERCISE 9-17 (Continued)

Note: this is not recognition of an impairment loss, but only an adjustment to FV at year end. No trigger event has occurred in 2013.

December 31, 2014

Under IAS 39, a trigger event has now occurred and an impairment loss is required to be recognized. The reason it is recognized separately is because impairment losses must be transferred to net income under IAS 39, whereas FV adjustments stay in OCI and AOCI.

First – recognize the FV change in the year:

Unrealized Gain or Loss - OCI	13,600	
FV-OCI Investments.....		13,600
(\$26,000 - \$12,400)		

Then - transfer the total accumulated impairment in value to net income (similar to recycling, as if the loss has been realized):

Loss on Impairment.....	17,450	
Unrealized Gain or Loss – OCI		17,450
(\$29,850 - \$12,400)		

EXERCISE 9-17 (Continued)

(c)

ASPE: Situation 1 – incurred loss model

December 31, 2013

No entry as there was no trigger or loss event in 2013.

December 31, 2014

Loss on Impairment	17,450	
Other Investments		17,450
(\$29,850 - \$12,400)		

ASPE: Situation 2 – fair value impairment model

December 31, 2013

Unrealized Gain or Loss	2,500	
FV-NI Investments		2,500
(\$29.00 - \$26.50) X 1,000 shares		

December 31, 2014

Unrealized Gain or Loss	15,400	
FV-NI Investments		15,400
(\$26.50 – \$11.10) X 1,000 shares = \$15,400		

EXERCISE 9-18 (15-20 minutes)

(a)

If Nadal Corporation's shares are quoted in an active market, Holmes is required to apply the FV-NI method to account for its investment. If Nadal's shares are not quoted in an active market, the cost method is required. However, in this case, Holmes could elect to use the FV-NI method.

FV-NI method:

January 3, 2014		
FV-NI Investments	135,000	
Cash.....		135,000
(30,000 X 30%) = 9,000 shares X \$15		
September 21, 2014		
Cash (\$39,000 X 30%)	11,700	
Dividend Revenue.....		11,700
December 31, 2014		
Unrealized Gain or Loss	2,250	
FV-NI Investments		2,250
FV = (9,000 shares X \$14.75) =	\$132,750	
Carrying amount =	<u>135,000</u>	
Adjustment required =	<u>\$ (2,250)</u>	

Cost method:

January 3, 2014		
Other Investments.....	135,000	
Cash.....		135,000
(30,000 X 30%) = 9,000 shares X \$15		
September 21, 2014		
Cash(\$39,000 X 30%)	11,700	
Dividend Revenue.....		11,700

EXERCISE 9-18 (Continued)

December 31, 2014

No entry required.

(b)

Equity method:

January 3, 2014

Significant Influence Investments.....	135,000	
Cash.....		135,000
(30,000 X 30%) = 9,000 shares X \$15		

September 21, 2014

Cash(\$39,000 X 30%)	11,700	
Significant Influence Investments		11,700

December 31, 2014

Significant Influence Investments.....	25,500	
Investment Income or Loss		25,500
(\$85,000 X 30%)		

(c)

Even though Holmes has significant influence over the operations of Nadal Corporation, ASPE allows the investor to choose the cost method instead of the equity method. However, if Nadal's shares are actively traded in the market, the cost method cannot be used and the FV-NI method is the only option to the equity method.

EXERCISE 9-18 (Continued)

(d)

A financial analyst is interested in assessing the current performance of the investor company management and what the company's prospects are for the future. The analyst is interested in the ability of the investor company to generate cash flows that will be replicated in future periods.

Under the equity method, the investor reports all increases (decreases) in the net assets of the investee company as an increase (decrease) in the carrying amount of the investment account on its balance sheet. In addition, the investor recognizes its share of the income (loss) earned by the investee company. Therefore, the investor's financial statements reflect the performance of investor company management, including its performance as it influences the investee company operations. This is relevant information for the financial analyst because the financial statements portray the economic substance of management's results for the period (as well as the investor's legal entitlement to its share of the changing net assets of the investee) and this provides a basis for predicting future performance and cash flows.

Under the FV-NI method, the shares in the investee are adjusted to their current market value, but the investor has made a decision to hold the shares. They are not "for trading." In addition, the investor's share of the dividends paid by the investee increase the investor's income even though the investee may have incurred losses. Alternatively, the investee could be profitable, but not pay any dividends to the investor, so what is reported on the investor's income statement does not correspond to the influence the investor has had on investee company operations. The FV-NI method, however, does recognize in the income statement and the balance sheet through the FV adjustment, the market's assessment of how the investee's current operations affect its value to the investor.

EXERCISE 9-18 (Continued)

The cost method is the least informative, as it has the downsides of the FV-NI method without the benefit of the FV adjustment each year.

EXERCISE 9-19 (10-15 minutes)

- (a) **\$110,000, the increase to the Investment account.**
- (b) **If the payout ratio is 35%, then 35% of their portion of the net income is their share of dividends: $\$110,000 \times 35\% = \$38,500$, the credit to the investment account.**
- (c) **Annual depreciation of excess payment for capital assets = \$14,000, the remaining credit to the investment account.**
- (d) **Fox's share is 25%, so, Total Net Income $\times 25\% = \$110,000$.**

Total Net Income of Gloven = $\$110,000 \div 25\% = \$440,000$.

- (e) **$\$38,500 \div 25\% = \$154,000$ or Total Net Income of \$440,000 $\times 35\% = \$154,000$**

- (f)

Cost of 25% of investment in Gloven Corp.	\$1,000,000
25% of carrying amount of Gloven Corp.	
$25\% \times \$3,200,000$	<u>(800,000)</u>
Payment in excess of share of carrying amount	200,000
Fair value allocated to depreciable assets	
$\$14,000 \times 10$	<u>(140,000)</u>
Unexplained excess assigned to goodwill	<u>\$ 60,000</u>

EXERCISE 9-20 (15-20 minutes)

(a)

December 31, 2013

FV-OCI Investments.....	1,250,000	
Cash		1,250,000

June 15, 2014

Cash (\$0.75 X 62,500 shares).....	46,875	
Dividend Revenue		46,875

December 15, 2014

Cash	46,875	
Dividend Revenue		46,875

FV-OCI Investments.....	62,500	
Unrealized Gain or Loss - OCI		62,500
\$21 X 62,500 shares = \$1,312,500		
\$1,312,500 – \$1,250,000 = \$62,500		

EXERCISE 9-20 (Continued)

(b)

December 31, 2013

Investment in Associate.....	1,250,000	
Cash		1,250,000

June 15, 2014

Cash (62,500 X \$.75)	46,875	
Investment in Associate		46,875

December 15, 2014

Cash.....	46,875	
Investment in Associate		46,875
Investment in Associate.....	130,000	
Investment Income or Loss		130,000
(25% X \$520,000)		

(c)

	Fair Value Method	Equity Method
Statement of Financial Position:		
Investment amount	\$1,312,500	\$1,286,250*
*\$1,250,000 + \$130,000 – \$46,875 – \$46,875		

The Investment accounts under both (a) and (b) are likely to be included in non-current assets. That is, the investment was not acquired for short term trading profits, in which case it would have been accounted for at FV-NI and been reported in current assets.

EXERCISE 9-20 (Continued)

(d)

Statement of Comprehensive Income:

	Fair Value Method	Equity Method
Dividend revenue	\$93,750	
Investment income		<u>\$130,000</u>
Included in net income	\$93,750	\$130,000
Other comprehensive income:		
Unrealized gain on FV-OCI investment during the year	<u>62,500</u>	<u> </u>
Effect on comprehensive income in 2014	<u>\$156,250</u>	<u>\$130,000</u>

EXERCISE 9-21 (25-35 minutes)

(a) 2014:

FV-NI Investments	196,000	
Cash		196,000
 Cash (\$15,000 X .30)	4,500	
Dividend Revenue		4,500
 FV-NI Investments	5,000	
Unrealized Gain or Loss.....		5,000
\$201,000 – \$196,000 = \$5,000		

Statement of Comprehensive Income, 2014

Net income (includes the dividend revenue of \$4,500 and the unrealized gain of \$5,000)	\$ xxx
Other comprehensive income:	
.....	<u>-0-</u>
Comprehensive income.....	<u>\$ xxx</u>

2015:

Unrealized Gain or Loss.....	61,000	
FV-NI Investments.....		61,000
Carrying amount of \$201,000 - \$140,000 FV		

Statement of Comprehensive Income, 2015

Net income (includes a deduction for the unrealized holding loss of \$61,000).....	\$ xxx
Other comprehensive income:	
.....	<u>-0-</u>
Comprehensive income.....	<u>\$ xxx</u>

EXERCISE 9-21 (Continued)

(b) 2014:

Investment in Associate.....	196,000	
Cash		196,000
 Cash (\$15,000 X .30)	4,500	
Investment in Associate		4,500
 Investment in Associate.....	22,500	
Investment Income or Loss		22,500
(\$75,000 X .30)		
 Investment Income or Loss	2,000	
Investment in Associate		2,000
 Purchase price.....	\$196,000	
Carrying amount (30% X \$520,000)	<u>(156,000)</u>	
Excess - unrecorded intangible.....	40,000	
Amortization (over 20 years).....	\$2,000	

Statement of Comprehensive Income, 2014

Net income (includes investment income from the associate of \$22,500 - \$2,000 = \$20,500)	\$ xxx
Other comprehensive income:	
.....	<u>-0-</u>
Comprehensive income.....	<u>\$ xxx</u>

There is no entry to adjust the investment to its fair value under the equity method.

EXERCISE 9-21 (Continued)

2015:

Investment Income or Loss	24,000	
Investment in Associate		24,000
(\$80,000 X .30)		

Investment Income or Loss	2,000	
Investment in Associate		2,000

Carrying amount of the investment in Martz Limited:

Cost	\$196,000
Dividend received in 2014	(4,500)
Income earned in 2014 (\$22,500 – \$2,000)	20,500
Loss incurred in 2015 (\$24,000 + \$2,000)	<u>(26,000)</u>
Carrying amount at December 31, 2015	<u>\$186,000</u>

Fair value of investment at December 31, 2015	\$140,000

Just because the fair value has dropped does not automatically mean that the investment is impaired. Perhaps there has been a general market decline and the decrease in value is considered temporary. If this is the case, no entries are needed to recognize the decline.

However, on the assumption that the drop in value of the investment does represent an impairment, recognition is required. The loss is equal to the difference between the investment's carrying amount and its recoverable amount – the higher of its value in use and fair value less costs to sell. Therefore, the impairment loss is \$186,000 - \$149,000 = \$37,000.

Loss on Impairment	37,000	
Investment in Associate		37,000

EXERCISE 9-21 (Continued)

Statement of Comprehensive Income, 2015

Net income (includes investment loss on the associate of \$26,000 and the impairment loss of \$37,000)	\$ xxx
Other comprehensive income:	<u>-0-</u>
Comprehensive income	<u>\$ xxx</u>

- (c) All entries would stay the same except for the entry recording the 2014 share of income. This entry would change to reflect the investor's share of the loss from discontinued operations separately from its share of the loss from continuing operations, as follows:

2014:

Investment in Associate	20,500	
Loss on Discontinued Operations*	6,000	
Investment Income or Loss		26,500
*(\$20,000 X .30)		

Martz Limited Income Statement reports :

Income from Continuing Operations	\$95,000
Loss from Discontinued Operations	<u>(20,000)</u>
Net Income	<u>\$75,000</u>

30% X \$95,000 =	\$28,500
Amortization of excess =	<u>(2,000)</u>
	<u>\$26,500</u> - ordinary
*30% X \$20,000 loss =	<u>\$(6,000)</u> - discount'd operations

The 2014 net income of Rae Corporation will be the same as in part (b).

EXERCISE 9-22 (10-15 minutes)

1. (a) \$12,250, dividend income.
(b) None reported—reduction of investment account (equity method).
(c) None reported—the dividend is eliminated as an intercompany transaction on consolidation.

Total dividend income reported is therefore \$12,250.

2. Sale price (\$94 X 6,000 shares)	\$564,000
Previous carrying amount (\$81 X 6,000 shares)	<u>486,000</u>
Holding gain in 2015	<u>\$ 78,000</u>

The \$78,000 increase in value while held in 2015 is reported in OCI on the 2015 Statement of Comprehensive Income.

Since there is no recycling according to the policy Chad Corp. is following, the total accumulated change in value since the investment was first acquired is transferred out of OCI directly to retained earnings.

Proceeds on sale (\$94 X 6,000 shares)	\$564,000
Purchase cost (\$76 X 6,000 shares)	<u>456,000</u>
Realized gain on sale of investment	<u>\$108,000</u>

Net income is not affected in 2014 or 2015 relative to the investment transactions. The Other Comprehensive Income portion of the Statement of Comprehensive Income in 2015 appears as follows:

Other Comprehensive Income:

Item that will not be reclassified to net income-

Holding gain on investment	\$ 78,000
Less realized gain transferred to retained earnings	<u>(108,000)</u>
Other Comprehensive Loss	<u>\$(30,000)</u>

EXERCISE 9-22 (Continued)

Because the Roddy Ltd. shares were the only investment accounted for at FV-OCI, no balance remains in AOCI.

EXERCISE 9-23 (25-30 minutes)

(a) Investment in Associate	438,000	
Cash		438,000

(b) Cost of investment		\$438,000
Carrying amount		
Assets	\$1,310,000	
Liabilities	<u>110,000</u>	
	1,200,000	
	<u>X 30%</u>	<u>360,000</u>
Cost in excess of share of carrying amount		<u>\$ 78,000</u>

Allocated	
Assets subject to depreciation	
[((\$880,000 – \$760,000) X 30%]	\$36,000
Goodwill	<u>42,000</u>
	<u>\$78,000</u>

Cash (\$110,000 X .30)	33,000	
Investment in Associate		33,000
Investment in Associate	45,000	
Loss on Discontinued Operations	15,000**	
Investment Income or Loss		60,000*
*\$200,000 X .30		
**\$50,000 X .30		
Investment Income or Loss	3,600	
Investment in Associate		3,600

EXERCISE 9-23 (Continued)

(b) Continued

Amortization of undervalued depreciable assets:

$$(\$36,000 \div 10) = \$3,600$$

Goodwill is not amortized, but rather is tested on an annual basis for impairment.

(c)

Because the associate's long-term prospects have deteriorated, this situation is likely one of impairment rather than a temporary decline.

In this case, the impairment loss should be measured and recognized at December 31, 2014 as follows:

Investment recoverable amount = $\$115 \times 3,000$ shs. = $\$345,000$

Carrying amount of investment:

$$\$438,000 - \$33,000 + \$45,000 - \$3,600 = \underline{\underline{446,400}}$$

$$\text{Impairment loss} = \underline{\underline{\$101,400}}$$

Entry:

Loss on Impairment	101,400
Investment in Associate	101,400

In the future, if the associate's fair value recovers, the impairment loss can be reversed.

EXERCISE 9-24 (25-30 minutes)

(a) Significant Influence Investment.....	410,000	
Cash.....		410,000

(b) Cost of 40% investment	\$410,000	

Washi Corp. carrying amounts:

Assets	\$825,000	
Liabilities	<u>115,000</u>	
	710,000	
	<u>X 40%</u>	<u>284,000</u>
Excess paid over share of book value		<u>\$126,000</u>

Excess allocated to:

Assets subject to depreciation		
[($\$750,000 - \$620,000$) X 40%]	\$52,000	
Residual to goodwill	<u>74,000</u>	
		<u>\$126,000</u>

Cash.....	44,800	
Significant Influence Investment		44,800
($\$112,000 \times .40$)		

Significant Influence Investment.....	65,200	
Investment Income or Loss.....		65,200
($\$163,000 \times .40$)		

Investment Income or Loss	5,200	
Significant Influence Investment		5,200
($\$52,000 \div 10$)		

(c)

In 2014, Washi reports:

Income from continuing operations	\$201,000
Loss from discontinued operations	<u>(38,000)</u>
Net income	<u>\$163,000</u>

EXERCISE 9-24 (Continued)

Loss on Discontinued Operations*	15,200	
Significant Influence Investment **	65,200	
Investment Income or Loss***		80,400
(\$190,000 X .40)		

*\$38,000 X .40 = \$12,000

**\$163,000 X 40% = \$65,200

***\$201,000 X 40% = \$80,400

Investment Income or Loss	5,200	
Significant Influence Investment		5,200
(\$52,000 ÷ 10)		

In 2014, Chi Inc. will include investment income in continuing operations of \$80,400 - \$5,200 = \$75,200; and an investment loss of \$15,200 in discontinued operations; for a total of \$75,200 - \$15,200 = \$60,000 in net income. Note that this is the same total amount as reported in part (b), but it is presented in two different places within net income.

(d) Chi's share of the unrealized gain on investments reported in OCI by Washi will be recorded by Chi as follows:

Investment in Associate.....	18,000	
Investment Income or Loss - OCI		18,000
(\$45,000 X .40)		

Chi Inc.

Statement of Comprehensive Income Year ended December 31, 2014

Net income (\$172,400 + \$65,200 - \$5,200)		\$232,400
Other comprehensive income:		
Items that may be reclassified subsequently to net income -		
Unrealized gain on investment	\$10,000	
Unrealized gain on associate's investment	<u>18,000</u>	<u>28,000</u>
Comprehensive income		<u>\$260,400</u>

TIME AND PURPOSE OF PROBLEMS

Problem 9-1 (Time 20-25 minutes)

Purpose— the student is required to prepare during-the-year and year-end entries for equity trading securities and to provide the presentation on the statement of financial position at the end of the fiscal year.

Problem 9-2 (Time 40-45 minutes)

Purpose— the student is required to prepare during-the-year and year-end entries for debt and equity trading securities. Entries are required both for separate tracking and for without separate tracking and reporting.

Problem 9-3 (Time 40-45 minutes)

Purpose—the student is required to prepare journal entries and adjusting entries for debt securities accounted for using the amortized cost model and then accounted for using the fair value through net income model. Bond premium amortization is also involved.

Problem 9-4 (Time 35-40 minutes)

Purpose—the student is required to prepare journal entries for the sale and purchase of equity securities accounted for under the fair value through other comprehensive income model along with the year-end adjusting entry for unrealized gains and losses. They are also asked to indicate how all balances are to be reported on each major financial statement.

Problem 9-5 (Time 50-60 minutes)

Purpose—to provide the student with an understanding of the reporting problems associated with equity securities accounted for under the fair value through other comprehensive income model. The problem includes purchases, dividends, sales and year-end adjustments to fair values. Statement presentation is required, including the reclassification adjustment out of other comprehensive income. Students are asked to determine how the net income in two years would differ if the entity applied ASPE and used the cost method.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 9-6 (Time 50-60 minutes)

Purpose—from successive balance sheet carrying amounts, the student is required to prepare entries for a bond investment accounted for using the amortized cost method and then the FV-NI model were purchased. The situation is then revised to include an impairment and students are required to account for that under both models.

Problem 9-7 (Time 35-40 minutes)

Purpose—to provide the student with an opportunity to record interest and amortization of a bond premium for a bond purchased between interest dates as well as a non-interest bearing Treasury bill. The cost of the bond must first be adjusted for the portion of interest accrued between interest dates. The student must determine the proper accounting and reporting for each investment. The student must also record the year-end adjustment for fair value and the disposal of the bond and Treasury bill.

Problem 9-8 (Time 35-40 minutes)

Purpose—to provide the student with an opportunity to prepare journal entries for equity investments accounted for under the FV-NI and FV-OCI methods as well as the equity method, and choices available under ASPE. The student is required to record fair value adjustments and describe how they would be reflected in the body and notes to the financial statements.

Problem 9-9 (Time 25-35 minutes)

Purpose—to provide the student with an understanding of the proper accounting treatment for equity securities accounted for using the fair value through other comprehensive income model and the resulting effect of a sale of an investment and the reclassification of realized gains and losses to retained earnings. The student is required to discuss the descriptions and amounts which would be reported on the statement of financial position and statement of comprehensive income with regard to these investments, plus prepare any necessary note disclosures.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 9-10 (Time 35-40 minutes)

Purpose—the student is required to review entries made by an employee to determine if they are in accordance with GAAP. If incorrect, correct entries are required to be made. The student is also required to explain when the equity method may or may not be appropriate.

Problem 9-11 (Time 35-45 minutes)

Purpose—the student is asked to prepare entries for a company's equity investment in a 30% held company on the basis that there is significant influence and that there isn't significant influence. The alternative method to be applied is the FV-OCI under IFRS. They must also discuss and make entries for the accounting method(s) that could be used under ASPE. The student must also consider how the entries would be affected by a partial year ownership period for the investment.

Problem 9-12 (Time 25-30 minutes)

Purpose—students are required to work through their understanding of how the FV-OCI method works and affects the statement of financial position and the statement of comprehensive income. Critical thinking is needed here as students must understand what each account represents in order to go back and prepare the entries that must have been made. The student is then asked to explain how the financial statements would differ if the investment had been accounted for at FV-NI.

Problem 9-13 (Time 50-60 minutes)

Purpose—students are provided with an opportunity to work their way through a situation that requires them to apply their knowledge of all methods of accounting for investments introduced in the chapter. They begin with the presentation of investments on the statement of financial position at the end of the preceding year and work through the transaction and valuation entries through the year and are required to determine what is reported on the year-end financial statements. Finally they are asked to explain to non-accountants what the balance in AOCI represents.

SOLUTIONS TO PROBLEMS

PROBLEM 9-1

(a)

October 8, 2014

Cash	212,850	
Investment Income or Loss		12,850
FV-NI Investments		200,000
(5,000 shares X \$4.30 X 99%= \$212,850)		

November 16, 2014

FV-NI Investments	133,500	
Investment Income or Loss	1,335	
Cash		134,835
(3,000 shares X \$44.50 = \$133,500)		

At December 31, 2014, MacAskill Corp. had the following fair value adjustment:

Trading Investment Portfolio — December 31, 2014

	<u>Carrying Amount</u>	<u>Fair Value</u>
Monty Ltd. preferred	\$140,000	\$106,000
Oakwood Inc., common	179,000	203,000
Patriot Corp., common	<u>133,500</u>	<u>122,000</u>
Total of portfolio	<u>\$452,500</u>	<u>\$431,000</u>

Adjustment needed to the portfolio = (\$452,500 – \$431,000) = \$21,500.

PROBLEM 9-1 (Continued)

(a) (Continued)

The entry on December 31, 2014 is therefore as follows:

Investment Income or Loss	21,500	
FV-NI Investments.....		21,500

(b) Current Assets:

Trading Equity Investments, FV-NI	\$431,000

Trading investments are generally current assets.

(c)

To be classified as a current asset under IFRS, a FV-NI investment only has to meet one of the following three criteria:

1. It is expected to be realized within 12 months from the reporting date; 2. It is held primarily for trading purposes; or 3. It is a cash equivalent. As long as any one is met, the investment is included in current assets.

Examples of situations where FV-NI investments would be excluded from current assets:

- The entity does not classify its assets and liabilities according to current and non-current categories.
- The investments are held in a portfolio of investments (such as a sinking fund) held for long term purposes, such as to retire a bond issue when it matures, or to be held specifically for a plant expansion planned for the future.
- The investment does not meet any one of the required criteria for classification as current, such as an equity investment that is acquired for the longer term. Management may want to use the accounting method whereby changes in its fair value are recognized and flow through net income.

PROBLEM 9-2

(a)

Williams Corp. bonds

February 1, 2014

FV-NI Investments (\$500,000 X 106.5%).....	532,500	
Interest Receivable.....	20,000	
Cash		552,500
(\$500,000 X 12% X 4/12)		

April 1, 2014

Cash	30,000	
Interest Receivable		20,000
Investment Income or Loss		10,000
(\$500,000 X 12% X 6/12)		

September 1, 2014

Cash	109,000	
Investment Income/Loss (FV-NI).....		2,500
FV-NI Investments (\$532,500 X 1/5)		106,500
(\$100,000 X 12% X 5/12 = \$5,000)		
(\$100,000 X 104% = \$104,000 + \$5,000 = \$109,000)		

October 1, 2014

Cash	24,000	
Investment Income or Loss.....		24,000
(\$400,000 X 12% X 6/12)		

December 31, 2014

Interest Receivable	12,000	
Investment Income or Loss.....		12,000
(\$400,000 X 12% X 3/12 = \$12,000)		
Investment Income or Loss	19,000	
FV-NI Investments		19,000

~~(\$532,500 - \$106,500) = \$426,000 - \$407,000 FV~~

PROBLEM 9-2 (Continued)

(b)

Saint Inc. bonds

July 1, 2014

FV-NI Investments (\$200,000 X 101%)	202,000	
Interest Receivable.....	1,500	
Cash		203,500
(\$200,000 X 9% X 1/12)		

December 1, 2014

Cash	9,000	
Interest Receivable		1,500
Investment Income or Loss.....		7,500
(\$200,000 X 9% X 6/12)		

December 31, 2014

Interest Receivable	1,500	
Investment Income or Loss.....		1,500
(\$200,000 X 9% X 1/12 = \$1,500)		

Investment Income or Loss	8,000	
FV-NI Investments		18,000

\$202,000 - \$194,000 FV = \$8,000

PROBLEM 9-2 (Continued)

(c)

Scotia Corp. shares

August 12, 2012		
FV-NI Investments	177,000	
Investment Income or Loss	1,770	
Cash		178,770
(3,000 shares X \$59 = \$177,000)		

September 28, 2014		
Cash	1,500	
Investment Income or Loss		1,500
(3,000 X \$.50)		

December 28, 2014		
Cash	1,560	
Investment Income or Loss		1,560
(3,000 X \$.52)		

December 31, 2014		
FV-NI Investments	4,500	
Investment Income or Loss		4,500
\$181,500 FV - \$177,000 = \$4,500		

(Note to instructor: Some students may debit Investment Income or Loss at the date of purchase of the bonds instead of Interest Receivable. This procedure is correct, assuming that when the cash is received for the interest, an appropriate credit to Investment Income or Loss is recorded.

PROBLEM 9-2 (Continued)

(d)

At December 31, 2013, the trading investment (FV-NI) would have been adjusted to its fair value of \$390,000. The sale in 2014 for \$400,000 would trigger an Investment Income of \$10,000 (\$400,000 – \$390,000) as an increase in the fair value of the investment since the December 31, 2013 year end.

(e)

July 1, 2014		
FV-NI Investments	202,000	
Interest Receivable.....	1,500	
Cash		203,500

December 1, 2014		
Cash	9,000	
Interest Receivable		1,500
Interest Income.....		7,154
FV-NI Investments*		346

*See amortization schedule below.

Although 6 months interest is received in cash, note that interest income and the premium amortization are determined using the effective interest method since the date of acquisition only.

December 31, 2014		
Interest Receivable (\$9,000 X 1/6)	1,500	
Interest Income (\$8,570 X 1/6)		1,428
FV-NI Investments* (\$430 X 1/6)		72

PROBLEM 9-2 (Continued)

December 31, 2014		
Unrealized Gain or Loss	7,582	
FV-NI Investments		7,582
Carrying amount = \$201,654 – \$72	\$201,582	
Fair value (\$200,000 X .97)	<u>194,000</u>	
Loss (fair value adjustment needed)	<u>\$7,582</u>	

PROBLEM 9-2 (Continued)

Schedule of Interest Income and Bond Premium Amortization—Effective Interest Method 9% Bond Yielding 8.5%

<u>Date</u>	<u>Cash Received</u>	<u>Interest Income</u>	<u>Bond Premium Amortization</u>	<u>Carrying Amount of Bonds</u>
07/01/14				\$202,000
12/01/14	\$ 7,500*	\$ 7,154*	\$ 346	201,654
06/01/15	9,000	8,570	430	201,224

*The premium is amortized from the date of acquisition only.
Therefore, the amortization for the 5 months ended Dec. 1, 2014
must be calculated using the 5 months cash interest and 5
months interest at the yield rate.

PROBLEM 9-3

(a) December 31, 2013

Bond Investment at Amortized Cost	108,660	
Cash		108,660

(b) December 31, 2014

Cash	7,000	
Bond Investment at Amortized Cost...		1,567
Interest Income.....		5,433

(c) December 31, 2016

Cash	7,000	
Bond Investment at Amortized Cost...		1,728
Interest Income.....		5,272

(d) December 31, 2013

FV-NI Investments	108,660	
Cash		108,660

(e) December 31, 2014

Cash	7,000	
Investment Income or Loss		7,000
Investment Income or Loss	2,160	
FV-NI Investments		2,160
(\$108,660 – \$106,500)		

PROBLEM 9-3 (Continued)

(f)	Cash	7,000	
	Investment Income or Loss		7,000
	Investment Income or Loss	1,850	
	FV-NI Investments		1,850
	(\$107,500 – \$105,650)		

(g)

As a member of management, I would want the accounting information and reporting system to be consistent with how various parts of the organization are managed.

If we invest in short-term trading securities with the objective of quickly recovering more from our investments than we paid for them, the important information to be reported is how much more (or less!) we received from these investments than the amount of cash we expended on them. This is exactly what the investment income/loss account measures and reports when interest and dividends are not reported separately from the other components of investment income.

However, if we acquire longer term investments with the objective of earning a specific yield on them to maturity, the yield (or interest income) should be reported separately from other types of investment income. Capital gains and losses provide additional information to management over and above the yield they committed to earn when the investments were acquired. Short-term variations in fair value are of little interest.

If information for tax purposes is important for management, the accounting information and reporting system should differentiate between the various types of income according to how each is taxed; e.g., dividend income is taxed differently than capital gains and losses (realized gains and losses on disposal).

PROBLEM 9-4

(a) Investments (FV-OCI)—December 31, 2014

<u>Securities</u>	<u>Cost</u>	<u>Fair Value</u>
Anderson Corp.	\$48,750	\$49,580
Munter Ltd.	580,000	569,500
King Corp.	<u>255,000</u>	<u>254,400</u>
Total of portfolio	<u>\$883,750</u>	<u>\$873,480</u>

Note: Balance in AOCI, December 31, 2014 = \$10,270 debit (\$873,480 – \$883,750) since all securities were purchased in 2014. The Anderson shares make up \$49,580 - \$48,750 = \$830 credit of this.

Sale of Anderson shares, January 15, 2015:

Gross selling price of 2,500 shares at \$21	\$52,500
Less fees	<u>(2,150)</u>
Net proceeds from sale	50,350
Cost of 2,500 shares	<u>(48,750)</u>
Total gain on sale of shares	<u>\$ 1,600</u>

The investment had a carrying amount of \$49,580 at December 31, 2014. The holding gain since December 31, 2014 = \$50,350 – \$49,580 = \$770.

January 15, 2015		
FV-OCI Investments.....	770	
Unrealized Gain or Loss - OCI.....		770
Cash.....	50,350	
FV-OCI Investments.....		50,350
Unrealized Gain or Loss - OCI	1,600	
Retained Earnings.....		1,600
(Proof of reclassification amount: \$830 + \$770 = \$1,600)		

PROBLEM 9-4 (Continued)

- (b) The total purchase price is:
 $(1,000 \times \$33.50) + \$1,980 = \$35,480.$

The purchase entry will be:

April 17, 2015		
FV-OCI Investments.....	35,480	
Cash		35,480

- (c) Investments (FV-OCI)—December 31, 2015

<u>Securities</u>	<u>Cost</u>	<u>Carrying Amount</u>	<u>Fair Value</u>	<u>Gain (Loss)</u>
Munter Ltd. (10,000 shs)	\$580,000	\$569,500	\$610,000	\$40,500
King Corp. (6,000 shs)	255,000	254,400	240,000	(14,400)
Castle Ltd. (1,000 shs)	<u>35,480</u>	<u>35,480</u>	<u>29,000</u>	<u>(6,480)</u>
Total of portfolio	<u>\$870,480</u>	<u>\$859,380</u>	<u>\$879,000</u>	<u>\$19,620</u>

December 31, 2015		
FV-OCI Investments	19,620	
Unrealized Gain or Loss - OCI.....		19,620

Note: It would be equally correct to prepare a separate entry to adjust each different security, or one combined entry adjusting each security separately.

PROBLEM 9-4 (Continued)

(d) Reporting of FV-OCI Investments

Statement of Financial Position, December 31, 2015

Long-term Investments (assumed)	
Investments, at fair value with gains and losses in OCI	\$ 879,000
Shareholders' Equity	
Accumulated other comprehensive income (credit)	\$8,520

Statement of Comprehensive Income, Year Ended Dec. 31, 2015

Net income (including any dividend income on shares)	\$	x
Other comprehensive income- items that will not be reclassified to net income:		
Holding gains on FV-OCI investments during year (\$770 + \$19,620)	\$20,390	
Reclassification adjustment for realized gains transferred to Retained Earnings	(1,600)	
Other comprehensive income		<u>18,790</u>
Comprehensive income		<u>\$ x + 18,790</u>

Statement of Changes in Accumulated Other Comprehensive Income, Year Ended Dec. 31, 2015

Accumulated other comprehensive income (loss), January 1, 2015	(\$10,270)
Other comprehensive income, 2015	<u>18,790</u>
Accumulated other comprehensive income (loss), December 31, 2015	<u>\$8,520*</u>

*Proof: Dec. 31/15 FV of \$879,000 – original cost of \$870,480 = \$8,520

(e)

Yes, Pascale's EPS would change. EPS is based on the net income number, and a policy of recycling realized gains/ losses on FV-OCI investments means the realized gain of \$1,600 would increase net income by the \$1,600 (net of tax) instead of retained earnings. Effect on EPS: $\$1,600 / 10,000 \text{ shs} = + \$ 0.16/\text{share}$

PROBLEM 9-5

(a) 2014

1.	Mar. 1	Cash	1,800	
		Dividend Revenue		1,800
		(900 X \$2)		
2.	Apr. 30	FV-OCI Investments	840	
		Unrealized Gain or Loss - OCI		840
		[300 X (\$10 – \$7.20)]		
		Cash	3,000	
		FV-OCI Investments.		3,000
		[300 X \$10]		
		Unrealized Gain or Loss - OCI	300	
		Gain on sale of Investments .		300
		[300 X (\$10 – \$9)]		
3.	May 15	FV-OCI Investments	3,200	
		Cash		3,200
		(200 X \$16)		

PROBLEM 9-5 (Continued)

4. Dec. 31	FV-OCI Investments.....	8,110	
	Unrealized Gain or Loss – OCI		8,110

Security	Quantity	Carrying Amount	Fair Value	Gain (Loss)
Earl Corp. ¹	1,200	\$ 14,700	\$ 20,400	\$ 5,700
Josie Corp. ²	900	14,850	17,100	2,250
Asher Corp. ³	200	1,440	1,600	160
Total of Portfolio		\$ 30,990	\$ 39,100	\$ 8,110

Carrying amounts at Dec. 31, 2014:

¹ Earl Corp. = (1,000 shares X \$11.50) + (200 shares X \$16)

² Josie Corp. = 900 shares X \$16.50

³ Asher Corp. = (500 shares X \$7.20) – 3,000 + 840
OR 200 shares X \$7.20

Note: It is equally correct to adjust each investment to fair value individually.

<u>2015</u>				
5. Feb. 1	Unrealized Gain or Loss – OCI	200		
	FV-OCI Investments.			200
	[200 X (\$7 – \$8)]			
	Cash	1,400		
	FV-OCI Investments.			1,400
	(200 X \$7)			
	Loss on Sale of Investments.	400		
	Unrealized Gain or Loss - OCI			400
	[200 X (\$7 – \$9)]			

PROBLEM 9-5 (Continued)

6. Mar. 1	Cash	1,800	
	Dividend Revenue		1,800
7. Dec. 21	Dividend Receivable.....	3,600	
or	Dividend Revenue		3,600
Dec. 31	(1,200 X \$3)		
8. Dec. 31	FV-OCI Investments.	4,200	
	Unrealized Gain or Loss – OCI		4,200

Security	Quantity	Carrying Amount	Fair Value	Gain (Loss)
Earl Corp.	1,200	\$ 20,400	\$ 22,800	\$ 2,400
Josie Corp.	900	<u>17,100</u>	<u>18,900</u>	<u>1,800</u>
Total of Portfolio		<u>\$ 37,500</u>	<u>\$ 41,700</u>	<u>\$ 4,200</u>

Note: It is equally correct to adjust each investment to fair value individually.

PROBLEM 9-5 (Continued)

(b)Reporting of FV-OCI Investments

Statement of Financial Position, December 31

	2014	2015
Long-term Investments (assumed)		
Investments, at fair value with gains and losses in OCI	\$ 39,100	\$41,700
Shareholders' Equity		
Accumulated other comprehensive income	\$1,100	\$5,500

Statement of Comprehensive Income

Net income (includes dividends and realized gains/losses*)	\$ x	\$ x
Other comprehensive income – items that may be reclassified subsequently to net income:		
Holding gains on FV-OCI investments during year	\$8,950	\$4,000
Reclassification adjustment for gains transferred to net income	(300)	400
Other comprehensive income	<u>8,650</u>	<u>4,400</u>
Comprehensive income	<u>\$x + 8,650</u>	<u>\$x + 4,400</u>

Statement Of Changes In Accumulated Other Comprehensive Income

	2015	2014
Accumulated other comprehensive income (loss), January 1,	(\$7,550**)	\$1,100
Other comprehensive income	<u>8,650</u>	<u>4,400</u>
Accumulated other comprehensive income December 31,	<u>\$1,100</u>	<u>\$5,500</u>

*Other revenues and gains		
Dividend income	\$1,800	\$4,950
Gain (Loss) on sale of investments in shares	<u>300</u>	<u>(400)</u>
	<u>\$2,100</u>	<u>\$4,550</u>

**** The opening balance can be calculated as the difference between the portfolio at cost and at fair value at Dec. 31, 2013.**

PROBLEM 9-5 (Continued)

(c)

If Castlegar Ltd. applied the cost method in accounting for these investments instead of the FV-OCI method, the net income numbers would not change.

Why is this?

- 1. Dividends are recognized in income under both approaches, and**
- 2. Under the cost method, the full amount of any realized gains or losses are recognized in net income when the investments are sold. Under the FV-OCI approach, the full amount of the realized gains or losses are transferred to net income when the investments are sold.**

Therefore, the net income reported is the same under both methods.

(d)

An investor is interested in assessing the prospects for future cash flows. Under the FV-OCI approach, the investments are reported at their fair value which is much more relevant information than the amount paid for the investments when they were acquired, as under the cost method.

In addition, the unrealized gains and losses reported in OCI tell the investor how well the enterprise managed its portfolio of investments during the period; whether management increased the potential for future cash flows or reduced that potential. The FV-OCI approach reports in OCI the unrealized gains and losses on the investments as they occur rather than waiting until they are sold and reporting the total and final change in value only at that point.

PROBLEM 9-6

**(a) Bond Amortization Schedule
Effective Interest Method
10% Bonds Sold to Yield 15%**

<u>Date</u>	<u>Cash Received</u>	<u>Interest Income</u>	<u>Discount Amorti- zation</u>	<u>Carrying Amount of Bonds</u>
12/31/13	—	—	—	\$487,214
12/31/14	\$55,000	\$73,082	\$18,082	505,296
12/31/15	55,000	75,794	20,794	526,090
12/31/16	55,000	78,910*	23,910*	550,000

*Adjusted due to rounding.

Dec. 31, 2013	
Bond Investment at Amortized Cost	487,214
Cash	487,214

Dec. 31, 2014	
Cash	55,000
Bond Investment at Amortized Cost.....	18,082
Interest Income	73,082

Dec. 31, 2015	
Cash	55,000
Bond Investment at Amortized Cost.....	20,794
Interest Income	75,794

Dec. 31, 2016	
Cash	55,000
Bond Investment at Amortized Cost	23,910
Interest Income	78,910

Cash	550,000
Bond Investment at Amortized Cost	550,000
(these two entries could be combined into one)	

PROBLEM 9-6 (Continued)

(b)

Dec. 31, 2013		
FV-NI Investments	487,214	
Cash		487,214

Dec. 31, 2014		
Cash	55,000	
Investment Income or Loss		55,000
FV-NI Investments	11,786	
Investment Income or Loss		11,786
(\$499,000 - \$487,214)		

Dec. 31, 2015		
Cash	55,000	
Investment Income or Loss		55,000
FV-NI Investments	24,000	
Investment Income or Loss		24,000
(\$523,000 - \$499,000)		

Dec. 31, 2016		
Cash	55,000	
Investment Income or Loss		55,000
FV-NI Investments	27,000	
Investment Income or Loss		27,000
(\$550,000 - \$523,000)		

Cash	550,000	
FV-NI Investments		550,000
(these three entries could be combined into one or two entries equally well)		

PROBLEM 9-6 (Continued)

(c)

Dec. 31, 2015

Cash	55,000	
Bond Investment at Amortized Cost	20,794	
Interest Income		75,794
Loss on Impairment	67,392	
Bond Investment at Amortized Cost		67,392

Incurred loss model: reduce carrying amount at Dec. 31, 2015 to the present value of the estimated future cash flows, discounted at the historic rate

Carrying amount before adjustment	\$526,090
PV of remaining cash flows:	
(\$500,000 + \$27,500) X PVIF _{n = 1, i = 15}	
= \$527,500 X .86957 =	<u>458,698</u>
Impairment loss	<u>\$ 67,392</u>

Dec. 31, 2016

Cash	27,500	
Bond Investment at Amortized Cost	41,302	
Interest Income		68,802
\$458,698 X 15% = \$68,802 (rounded)		
Cash	500,000	
Bond Investment at Amortized Cost		500,000
\$458,698 + \$41,302 = \$500,000		

PROBLEM 9-6 (Continued)

(d)

Dec. 31, 2015		
Cash	55,000	
Investment Income or Loss		55,000
Investment Income or Loss	11,200	
FV-NI Investments		11,200
(\$499,000 – FV of \$487,800)		

Dec. 31, 2016		
Cash	27,500	
Investment Income or Loss		27,500
FV-NI Investments	12,200	
Investment Income or Loss		12,200
(\$500,000 - \$487,800)		

Cash	500,000	
FV-NI Investments		500,000
(these three entries could be combined into one or two entries equally well)		

(e)

As company controller, I would use a method that aligned with the reason the bonds were acquired. If the bonds were expected to be held to maturity, I would use the amortized cost method. Under ASPE, however, the impairment loss is calculated differently. The investment would be written down to the greater of the present value of the remaining cash flows discounted at the current market rate of interest and its net realizable value. In the case presented, this would likely be close to the \$487,800 fair value.

If the bonds were acquired for trading purposes and short-term profit, I might want to fair value the investments and account for them at FV-NI. ASPE does have a fair value option available. In this case, the accounting would be the same as in part (d).

PROBLEM 9-7

- (a) It is first necessary to determine the proper accounting treatment for each individual investment. The Chiang Corp. common shares are an investment in an equity instrument that is not held for trading purposes and thus would likely be accounted for using the FV-OCI model special election.

The Government of Canada bonds and the note investment should be accounted for at cost/amortized cost since they are being managed for their yield to maturity. The Government of Canada bonds would be accounted for at cost, since there is no difference between the stated interest rate and the market rate. The purchase price of the bonds was the same as their face value so there is no need to amortize any premium or discount. The note investment should be accounted for at amortized cost since it is being managed for its yield to maturity. Although the note says that it is non-interest-bearing, it was purchased to yield 10% interest, and the resulting discount from its face value must be amortized over the life of the note. Be aware that the accounting standards refer to both the cost and amortized cost valuation methods as “at amortized cost.”

The Monet bonds should be accounted for using the FV-NI model (with interest not reported separately according to the company policy) as they are being managed based on their fair value in the hopes of trading them when their market value increases as interest rates fall.

PROBLEM 9-7 (Continued)

Interest Receivable	
(\$50,000 X 1.08) – (\$56,000)	2,000
FV-OCI Investments.....	37,400
Bond Investment at Amortized Cost	100,000
FV-NI Investments	54,000
Note Investment at Amortized Cost	57,143
Investments	250,543

The investment in Monet Corp. bonds is corrected to separate the interest purchased from the price of the bond. The Interest Income or Loss account could have been debited instead of the Interest Receivable as long as it was also credited later when the full interest is received.

(b)	December 31, 2014		
Interest Receivable		4,500	
Note Investment at Amortized Cost		952	
Interest Income (\$952 + \$1,500)			2,452
Investment Income or Loss.....			3,000
Accrued interest (Monet)			
\$50,000 X .12 X 6/12 =	\$3,000		
Accrued interest – Gov't bonds			
\$100,000 X .06 X 3/12 =	<u>1,500</u>		
Interest Receivable	<u>\$4,500</u>		
Interest on Note			
(\$57,143 X 10% X 2/12)	952		

PROBLEM 9-7 (Continued)

<u>Investment</u>	<u>Carrying Amount</u>	<u>Fair Value</u>	<u>Gain (Loss)</u>
Chiang Corp., Common (FV-OCI)	\$37,400	\$33,800	\$ (3,600)
Monet Corp. bonds (FV-NI)	54,000	55,600	1,600
Unrealized Gain or Loss - OCI		3,600	
FV-NI Investments		1,600	
Investment Income or Loss			1,600
FV-OCI Investments.....			3,600

PROBLEM 9-7 (Continued)

(c) February 1, 2015		
Note Investment at Amortized Cost	476	
Interest Income.....		476
(\$57,143 X .10 X 1/12) = January 2015 interest income		

Cash.....	59,600	
Note Investment at Amortized Cost		
(\$57,143 + \$952 + \$476).....		58,571
Gain on Sale of Investments		1,029

July 1, 2015		
Cash (\$109,200 + \$1,500).....	110,700	
Bond Investment at Amortized Cost..		100,000
Interest Income.....		1,500
(\$100,000 X .06 X 3/12)		
Gain on Sale of Investments		9,200

(d) May 1, 2015		
Note Investment at Amortized Cost	1,905	
Interest Income.....		1,905

Interest income using effective interest method since
December 31, 2014: (\$57,143 X .10 X 4/12)

Cash.....	60,000	
Note Investment at Amortized Cost		
(\$57,143 + \$952 + \$1,905).....		60,000

PROBLEM 9-7 (Continued)

- (e) If Octavio Corp. was a private entity following ASPE, then the Chiang Corp. common shares would have to be accounted for using fair value through net income (since ASPE does not have an FV-OCI option), or at cost, if the Chiang shares do not trade in an active market.**

Under ASPE, the straight-line method of determining interest could be used instead of the effective interest method, and the interest income on the Monet bonds would have to be accounted for and reported separately from other types of investment income.

(f)

A public company must follow IFRS. However, a private company can choose to follow either IFRS or ASPE.

PROBLEM 9-8

(a) Investment in trading (FV-NI) securities:

Investment Income or Loss	80,000	
FV-NI Investments		80,000

Calculations:

<u>Securities</u>	<u>Cost</u>	<u>Fair Value</u>	<u>Unrealized Gain (Loss)</u>
Delaney Motors	\$1,400,000	\$1,600,000	\$200,000
Isha Electric	<u>1,000,000</u>	<u>720,000</u>	<u>(280,000)</u>
Total of portfolio	<u>\$2,400,000</u>	<u>\$2,320,000</u>	<u>\$(80,000)</u>

Investment in FV-OCI securities - Norton:

FV-OCI Investments	725,000	
Investment Income or Loss - OCI		725,000

Fair value of investment in Norton	\$22,225,000
Carrying amount of investment	<u>21,500,000</u>
Unrealized holding gain	<u>\$ 725,000</u>

PROBLEM 9-8 (Continued)

(b) Statement of Financial Position:

Current Assets

Trading securities, at fair value	\$2,320,000

Long-term Investments

Investment in shares of Norton Industries, at fair value with holding gains in OCI	\$22,225,000

Shareholders' Equity

Accumulated other comprehensive income (loss) (\$22,500,000 - \$22,225,000)	\$(275,000)

Statement of Comprehensive Income:

Other Expenses and Losses (in net income)

Investment loss on securities at FV-NI	(\$80,000)

Other Comprehensive Income:

Item that will not be reclassified to net income-

Holding gain on FV-OCI securities	<u>725,000</u>

Included in Comprehensive income	<u>\$ 645,000</u>

Statement of Changes in Accumulated Other Comprehensive Income:

Accumulated other comprehensive income (loss),

January 1, 2014*	\$(1,000,000)

Other comprehensive income, 2014

<u>725,000</u>

Accumulated other comprehensive income (loss),

December 31, 2014	<u>\$(275,000)</u>

*Norton: \$21,500,000 opening FV – \$22,500,000 invested

PROBLEM 9-8 (Continued)

(c)

Investment in Associate	2,484,000	
Investment Income or Loss		2,484,000
(\$13,800.000 X 18%)		

Cash (\$2.4 M X 18%).....	432,000	
Investment in Associate		432,000

Brooks has significant influence and should apply the equity method. No fair value adjustments are recorded under the equity method.

(d)

Under parts (a) and (b), if Brooks Corp. was a private entity following ASPE, then the Norton Industries shares would have to be accounted for using fair value through net income (since ASPE does not have an FV-OCI option). However, if the Norton Industries shares were not actively traded and there was no active market price available for the shares, then Brooks would account for the shares at cost.

Under part (c), ASPE permits the investor to account for shares in a significantly influenced company to be accounted for using the equity method or at cost. However, if the shares of Norton Industries were actively traded, then the cost method is not permitted and the FV-NI method is.

(e)

The 20%-50% holding is a guide only. It is up to the entity to determine if significant influence exists. If the other shares are widely held, for example, an 18% interest could result in very significant influence. On the other hand, if one other party owned the other 55% of the shares, a 45% interest might not enable the investor to have any influence at all.

PROBLEM 9-9

(a) Equity investments accounted for using the FV-OCI model:

<u>Security</u>	<u>Cost</u>	<u>Fair Value</u>	<u>Holding Gain (Loss)</u>
Frank, Inc.	\$ 22,000	\$ 32,000	\$ 10,000
Ellis Corp.	115,000	95,000	(20,000)
Mendota Ltd.	<u>124,000</u>	<u>96,000</u>	<u>(28,000)</u>
Total of portfolio	<u>\$261,000</u>	<u>\$223,000</u>	<u>\$(38,000)</u>

Statement of Financial Position—December 31, 2014

Long-term investments:

Investments at fair value, with gains and losses in OCI \$223,000

Shareholders' equity:

Accumulated other comprehensive loss \$(38,000)
(\$261,000 – \$223,000)

(b) Equity investments accounted for using the FV-OCI model:

<u>Security</u>	<u>Cost</u>	<u>Carrying Amount</u>	<u>Fair Value</u>	<u>2015 Holding Gain (Loss)</u>
Ellis Corp.	\$115,000	\$ 95,000	\$140,000	\$45,000
Mendota Ltd.	124,000	96,000	92,000	(4,000)
Kaptein Inc.	<u>50,000</u>	<u>50,000</u>	<u>44,000</u>	<u>(6,000)</u>
Total of portfolio	<u>\$289,000</u>	<u>\$241,000</u>	<u>\$276,000</u>	<u>\$35,000</u>

Statement of Financial Position—December 31, 2015

Long-term investments:

Investments at fair value, with gains and losses in OCI \$276,000

Shareholders' equity:

Accumulated other comprehensive loss* (\$13,000)
*(cost of \$289,000 – FV of \$276,000)

PROBLEM 9-9 (Continued)

(c)

Statement of Comprehensive Income – 2015

Net income (includes only dividends from FV-OCI Investments)		\$158,300
Other Comprehensive Income:		
Items that will not be reclassified to net income -		
Holding gains in year	\$36,660	
Realized gains transferred to retained earnings	(11,660)	<u>25,000</u>
Comprehensive Income		<u>\$183,300</u>

Calculations:

Proceeds on Frank Inc. shares (2,000 X \$17) X .99=	\$33,660
Carrying amount, Dec. 31, 2014	<u>32,000</u>
Holding gain, 2015	<u>\$1,660</u>

Holding gain on other shares in 2015	<u>35,000</u>
Increase in OCI due to unrealized holding gains	<u>\$36,660</u>

Transfer of realized gain from OCI to retained earnings:

Net proceeds from sale of Frank Inc. shares	\$33,660
Cost of shares (2,000 X \$11)	<u>(22,000)</u>
Gain on sale of securities while held	<u>\$11,660</u>

Note: Under IFRS, transaction costs are capitalized for all investments except those accounted for under the FV-NI model.

PROBLEM 9-9 (Continued)

(d) Note X—Investments Accounted for Using the Fair Value Through Other Comprehensive Income Model.

Investments are accounted for using the fair value through other comprehensive income model with realized gains and losses transferred to retained earnings, and are reported at fair values based on third-party quotes. The fair values and unrealized holding gains and losses of equity securities were as follows:

December 31, 2015

FV-OCI model	Cost	<u>Gross Unrealized</u>		Fair Value
		Gains	Losses	
Equity securities	\$289,000	\$25,000	\$(38,000)	\$276,000

December 31, 2014

FV-OCI model	Cost	<u>Gross Unrealized</u>		Fair Value
		Gains	Losses	
Equity securities	\$261,000	\$10,000	\$(48,000)	\$223,000

(e)

The information about other comprehensive income indicates whether the company's management of its investment portfolio during the year has added to (or reduced) the potential for cash flows, the extent to which such gains and losses have been realized or converted to cash, and whether future net income will be affected as gains and losses (in OCI) are realized. The AOCI, on the other hand, indicates the extent to which investments accounted for at FV-OCI are reported at amounts above (or below) their original cost at the company's year end.

PROBLEM 9-10

- (a) Some of the journal entries proposed by Ted Yan are not in accordance with the applicable reporting standards. While some of the entries use accounts that are different from those used in Chapter 9, they are not incorrect. Each company labels individual accounts using slightly different titles. For those entries that are not correct, revised entries are presented below.

Entry 1

The proposed entry is in accordance with applicable reporting standards (IFRS in this case since the company is a public company). The difference between the net proceeds from the sale of a trading equity security and its carrying amount represents the realized gain or loss. This amount can be presented as part of Investment Income (FV-NI) since the purpose of trading investments is to generate Investment Income from gains on trading as well as receipts of interest and dividends. Any transaction costs on this disposition have been expensed in the period because the net proceeds have been used to determine the investment gain.

Entry 2

The November 26, 2014, entry to record the purchase of Mer Limited common shares is not in accordance with IFRS. Brokerage fees for trading investments accounted for using the FV-NI model must be expensed and cannot be included in the cost of the investment. The following entry should have been made:

FV-NI Investments	102,200	
Investment Income or Loss		
.....	2,800	
Cash		105,000

PROBLEM 9-10 (Continued)

Entry 3

The proposed entry is not in accordance with IFRS. IFRS requires that the carrying amount of a portfolio of trading investments be reported at fair value at the reporting date. Adjustments to fair value are recorded at each reporting date and should be the difference between the investments' carrying amount and its current fair value, not its cost and fair value. These adjustments are included in the determination of net income for the period, and need to be separated from the amount that is reported in OCI, such as the adjustment on the Admin Importers shares. In addition, an allowance account might be used in situations where there is an impairment of an amortized cost investment, but it is not appropriate for the fair value adjustments of FV-NI and FV-OCI investments.

The correct entry as of November 30, 2014 is as follows, assuming the correct entry was made for Entry 2:

<u>Security</u>	<u>Carrying Amount</u>	<u>Fair Value</u>	<u>Holding Gain (Loss)</u>
Craxi Electric	\$314,000	\$323,000	\$ 9,000
Renoir Inc.	181,000	180,000	(1,000)
Mer Limited	<u>102,200</u>	<u>108,000</u>	<u>5,800</u>
Total of portfolio	<u>\$597,200</u>	<u>\$611,000</u>	<u>\$13,800</u>

Thus, the correct entries would have been:

FV-NI Investments	13,800	
Investment Income or Loss		13,800
 FV-OCI Investments		
(\$205,000 – \$198,000)	7,000	
Unrealized Gain or Loss - OCI		7,000

PROBLEM 9-10 (Continued)

Entry 4

As Fellows Inc. has indicated it exercises significant influence over Yukasato Inc. (25% ownership), its investment requires using the equity method of accounting. Accordingly, the dividends received from Yukasato are treated as a reduction of Fellows' investment in Yukasato. The remaining dividends are correctly recognized as dividend income, although those from Craxi Electric, a trading security, are likely not differentiated from other investment income. The correct entries as of November 30, 2014, are as follows:

Cash.....	13,500	
Dividend Revenue		9,000
Investment Income or Loss		4,500

To record dividends received from investments where Fellows does not have significant influence (Admin Importers, \$9,000 and Craxi Electric, \$4,500)

Cash.....	25,000	
Investment in Associate		25,000

To record dividend received from Yukasato Inc., accounted for using the equity method.

Entry 5

The entry for recording Fellows' share of Yukasato's reported net income, under the equity method, is in accordance with IFRS.

There is, however, an entry missing for the amortization of the excess of purchase price over carrying amount of the assets of Yukasato.

PROBLEM 9-10 (Continued)

Purchase price	\$588,000
Carrying amount of net assets (25% X \$1,800,000)	<u>(450,000)</u>
Excess of purchase price over carrying amount	138,000
Amortization (\$138,000 / 20 years)	<u>\$6,900</u>
Investment Income or Loss	6,900
Investment in Associate	6,900

(b)

The circumstances where it would be inappropriate to use the equity method of accounting, even though the investor owns 25 percent of the investee's common share, would be when the investor does not have significant influence over the operating and financial policies of the investee.

The investment would then be classified according to the nature of the investment and management's investment strategy. It could be classified as trading (FV-NI model) and adjusted to fair value if it meets the criteria or if management wants to use the fair value option. Alternatively, it could be accounted for using the FV-OCI model. The FV-OCI method would be more appropriate if the investor intends to hold the investment for longer-term, relationship purposes.

The nature of the investment in Yukasato indicates a longer term investing strategy than a trading classification (using the FV-NI model) would require. The recommended accounting model would be the FV-OCI model.

PROBLEM 9-10 (Continued)

(c)

To be accounted for using the fair value through other comprehensive income model, the investment (under IASB 9 for financial instruments, FV-OCI investments normally will be limited to equity investments in other companies) must not be held for the purposes of trading.

For example, an entity may acquire an investment for longer term strategic purposes (but where the investor does not have significant influence or control). These shares are not held for realizing direct investment gains. Therefore, a special election may be made, on acquisition, to classify the investment as FV-OCI, without recycling gains and losses back through net income. In addition, the standard indicates that any dividends received from such an investment are recognized in net income unless the dividend is determined to be a return of capital rather than a return on the investment. They can be classified as either current or long-term assets depending on management's intention.

Trading investments accounted for using the FV-NI model, on the other hand, are financial assets that are reported at fair value, with unrealized and realized holding gains and losses reported as part of net income.

Fellows appears to make some investments for the purposes of short-term trading (Craxi, Renoir, Seferis, and Mer), while other, larger holdings are acquired for longer-term purposes. Admin Importers and Yukasato Inc. are examples of the latter.

PROBLEM 9-11

(a) Investment Accounted For Using The FV-OCI Model

FV-OCI Investments.....	375,000	
Cash (15,000 X \$25).....		375,000
 Cash (\$5,000 X 15/50)	1,500	
Dividend Revenue		1,500
 Unrealized Gain or Loss - OCI.....	15,000	
FV-OCI Investments.....		10,500
[15,000 shares X (\$24 – \$25)]		

(b) Equity Method (15,000 shares = 30% holding)

Cost of 30% interest		\$375,000
Carrying amount		
Assets (\$290,000 + \$860,000)	\$1,150,000	
Liabilities	<u>(150,000)</u>	
	\$1,000,000	
	<u>X .30</u>	<u>300,000</u>
Excess paid above share of book value		\$ 75,000
Allocated to:		
Assets subject to depreciation		
[((\$960,000 – \$860,000) X .30)]		<u>30,000</u>
Unexplained excess to Goodwill		<u>\$ 45,000</u>

Subsequent amortization needed:

On undervalued depreciable assets (\$30,000 ÷ 8)	\$3,750
On unrecorded Goodwill – not amortized	<u>0</u>
	<u><u>\$3,750</u></u>

PROBLEM 9-11 (Continued)

Alternatively, the amount of goodwill is calculated as follows:

Cost		\$375,000
Fair value of net identifiable assets		
Assets (\$290,000 + \$960,000)	\$1,250,000	
Liabilities	<u>(150,000)</u>	
	\$1,100,000	
	<u>X .30</u>	<u>330,000</u>
Excess assumed to be goodwill		<u>\$ 45,000</u>

Equity Method Entries

Investment in Associate.....	375,000	
Cash		375,000
Cash.....	1,500	
Investment in Associate		1,500
(\$5,000 X .30)		
Investment in Associate.....	30,000	
Investment Income or Loss		30,000
(\$100,000 X .30)		
Investment Income or Loss	3,750	
Investment in Associate		3,750

- (c) The answer to part (a) would remain the same. The entries do not relate to a particular time frame but rather reflect cash dividends as income received in December and show the investment at fair value at the reporting date.

For part (b), the two entries that record the proportionate share of the investee's net income and the depreciation of the undervalued assets would need to be pro-rated to reflect a half-year of ownership. The general concept is that you can only earn income on assets from the point in time that you own/control them.

PROBLEM 9-11 (Continued)

(d)

If Melbourne Corp. was a private entity following ASPE, and did not have significant influence, then the investment in Noah Corp. shares would be accounted for using the cost method. Because the shares are not actively traded, it is unlikely the FV-NI method would be chosen. ASPE does not recognize the FV-OCI method.

Investment Accounted For Using Cost Model

Other Investments	375,000	
Cash (15,000 X \$25).....		375,000
 Cash (\$5,000 X 15/50)	1,500	
Dividend Revenue		1,500

If Melbourne Corp. has significant influence, the equity method could be used as illustrated in part (b).

Investment Accounted For Using The Equity Method

Significant Influence Investment.....	375,000	
Cash		375,000
 Cash.....	1,500	
Significant Influence Investment		1,500
(\$5,000 X .30)		
 Significant Influence Investment.....	30,000	
Investment Income or Loss.....		30,000
(\$100,000 X .30)		
 Investment Income or Loss	3,750	
Significant Influence Investment		3,750

PROBLEM 9-11 (Continued)

(e)

Financial Statement Amounts Reported ASPE Choices from (d)

	Equity Method	Cost Method
Investment in Noah Corp., Dec. 31, 2014	\$399,750*	\$375,000
Investment Income, year ended Dec. 31, 2014	\$26,250**	\$1,500

*\$375,000 - \$1,500 + \$30,000 - \$3,750 = \$399,750

** \$30,000 - \$3,750 = \$26,250

Assuming Melbourne has significant influence over the operating, financing, investing and dividend policies of Noah Corp., the equity method provides the more relevant and faithful representation of the economic events and circumstances. If management's influence has been positive in an accounting period, the effect will be a positive one on Melbourne's statement of income; if Noah's results are not good, the poor result will be reflected on the investor's financial statements. As Noah's net assets increase due to earning profits, so will Melbourne's carrying amount of its investment representing its share of Noah's increased net assets. When Noah pays out a dividend and its net assets decrease, so will the carrying value of Melbourne's investment in Noah.

The cost method has some support when the investor cannot significantly influence the policies of the investee. Because the investor cannot control or even influence in any real way the paying of dividends up to the investor, no income should be reported as earned until received. This is consistent with the revenue recognition principle when there are collectability issues. However, if possible, the estimated fair value of the investment would be useful information for users.

PROBLEM 9-12

(a) January 1, 2014

Fair value of FV-OCI equity investments	\$240,000
Accumulated other comprehensive income	<u>(30,000)</u>
Thus, cost of FV-OCI equity investments = ...	<u>\$210,000</u>

December 31, 2014

Fair value of FV-OCI equity investments	\$185,000
Cost of FV-OCI equity investments	<u>(140,000)</u>
Thus, accumulated other comprehensive income .	<u>\$ 45,000</u>

Because there were no new investments acquired, the reduction in the cost of the FV-OCI investments must be the cost of the investments sold:

cost of the investments sold:	\$70,000
Gain on their sale =.....	<u>30,000</u>
Thus, proceeds on the sale =.....	<u>\$100,000</u>

Without knowing how much of the Jan. 1, 2014 AOCI relates to the shares sold, only a “net” entry can be made on the date of sale:

Cash	100,000
Gain on Sale of Investments	30,000
FV-OCI Investments	70,000

PROBLEM 9-12 (Continued)

(b)

Acker Ltd.
Statement of Comprehensive Income
For the Year Ended December 31, 2014

Net income.....	\$35,000
Other comprehensive income	
Items that may be reclassified subsequently	
to net income:	
Total holding gains arising during the year .	\$45,000*
Less: Reclassification of realized gain	
to net income	<u>30,000</u> <u>15,000</u>
Comprehensive income	<u><u>\$50,000</u></u>

*Accumulated other comprehensive	
income 12/31/14.....	\$45,000
Accumulated other comprehensive	
income 1/1/14.....	<u>(30,000)</u>
Increase in unrealized holding gain.....	15,000
Realized holding gain	<u>30,000</u>
Total holding gains arising during period	<u><u>\$45,000</u></u>

(c)

Acker Ltd.
Statement of Financial Position
As of December 31, 2014

<u>Assets</u>		<u>Equity</u>	
FV-OCI equity		Contributed capital	\$260,000
investments	\$185,000	Retained earnings	35,000
Cash	155,000*	Accumulated other	
		comprehensive	
		income	<u>45,000</u>
Total assets	<u><u>\$340,000</u></u>	Total equity	<u><u>\$340,000</u></u>

PROBLEM 9-12 (Continued)

*Beginning balance	\$50,000
Dividend revenue.....	5,000
Cash proceeds on sale.....	<u>100,000</u>
	<u>\$155,000</u>

(d)

The opening balance sheet at January 1, 2014 (December 31, 2013), aside from describing the investments as FV-NI investments, would also show retained earnings of \$30,000 instead of AOCI of \$30,000. Because the assets are measured at fair value in both cases, the only difference is that the unrealized gains or losses would have been recognized in net income and closed into retained earnings under ASPE.

The same holds true for the closing balance sheet at December 31, 2014. The investments will be described as FV-NI investments, and because they are measured at the same fair value that the FV-OCI classified investments were, the total shareholders' equity must be the same amount as well: \$340,000. Because the contributed capital is not affected, the retained earnings would be $\$340,000 - \$260,000 = \$80,000$.

With an opening retained earnings of \$30,000 and an ending balance of \$80,000, net income for 2014 must have been \$50,000 - the same as Comprehensive income under the FV-OCI model. Why is this? Because unrealized and realized gains and losses are recognized under both models, and there is no "other comprehensive income" under the FV-NI model, all gains and losses must be recognized in net income in the period they arise. Under the FV-OCI approach, they are split between net income and OCI.

PROBLEM 9-13

(a)

2014

Hysenaj Ltd. shares (FV-NI)

Mar. 18	Cash.(\$3 X 6,400).....	19,200	
	Investment Income or Loss		19,200

Sept.17	Cash	367,488*	
	FV-NI Investments		316,300
	Investment Income or Loss		51,188
	*(6,400 X \$58) X 99%		

Growthpen Corp. shares (FV-OCI)

Jan. 2	FV-OCI Investments	1,675*	
	Investment Income or Loss – OCI		1,675

*At Dec. 31/13, 1,000 shs FV = 1000/4000 X 26,100=		6,525
FV of shs. on Jan. 2/14 = 1,000 X 8.50 =	8,500	
Less commission	(300)	<u>8,200</u>
Increase in value in 2014	=	<u>1,675</u>

Cash (1,000 X \$8.50) - \$300.....	8,200	
FV-OCI Investments.....		8,200
Unrealized Gain or Loss – OCI	1,000	
Retained Earnings		1,000

\$1,675 – (25% X \$2,700 loss) = \$1,000 gain in AOCI and OCI

Mar. 18	Cash (3,000 X \$1).....	3,000	
	Dividend Revenue.....		3,000

PROBLEM 9-13 (Continued)

Dec. 31 **FV-OCI Investments** **1,425**
 Unrealized Gain or Loss – OCI..... **1,425***

***Balance in FV-OCI investment account:**

(\$26,100 + \$1,675 - \$8,200) **= \$19,575**

FV of shares at Dec. 31/14:

\$7 X 3,000 shares **= 21,000**

Unrealized gain to OCI..... **= \$ 1,425**

Metal Corp. bonds at amortized cost

May 1 **Cash (6% X \$500,000) X 6/12** **15,000**
 Interest Receivable **5,000**
 Interest Income (\$13,047 X 4/6) .. **8,698**
 Investment in Bonds at Amortized Cost
 (\$1,953 X 4/6) **1,302**

Date	Cash received	Interest income	Premium amort'n	Investment balance
Nov 1/13				\$521,878
May 1/14	\$15,000	\$13,047	\$1,953	519,925
Nov 1/14	15,000	12,998	2,002	517,923
May 1/15	15,000	12,948	2,052	515,871

Jun.30 **Interest Receivable** **5,000***
 Interest Income (\$12,998 X 2/6) .. **4,333**
 Investment in Bonds at Amortized Cost **667****
 ***\$15,000 X 2/6 **\$2,002 X 2/6**

Balance in Investment In Metal bonds account at June 30/14:

\$521,227 – \$1,302 – \$667 = \$519,258

PROBLEM 9-13 (Continued)

Jun.30	Cash (\$500,000 X 1.02)	510,000
	Cash (for interest)	5,000
	Loss on Sale of Investments	9,258
	Interest Receivable	5,000
	Investment in Bonds at Amortized Cost	519,258

Investment in Lloyd Corp. shares

It appears that Minute Corp. can exercise significant influence over Lloyd's operations and finances, and there is a $3,600/12,000 = 30\%$ equity interest, therefore the equity method should be used.

Jan. 3	Investment in Associate	234,000
	Cash.....	234,000
	Analysis:	
	Paid	<u>\$234,000</u>
	For 30% of BV: (\$1,400,000 - \$750,000) X .3 =	<u>195,000</u>
	+ 30% of patent FV: (\$60,000 X .3) =	<u>18,000</u>
		<u>213,000</u>
	Excess = goodwill	<u>\$21,000</u>
	Patent FV difference to be amortized at a rate of \$18,000/6 years = \$3,000 per year	
Oct. 15	Cash	3,600
	Investment in Associate	3,600
Dec. 31	Investment in Associate.....	14,400
	Investment Income or Loss	14,400
	\$48,000 X 30%	

PROBLEM 9-13 (Continued)

Investment Income or Loss.....	3,000	
Investment in Associate		3,000

The carrying amount of the Investment in Lloyd Corp. in Minute's accounts is now:

$$\text{\$234,000} - \text{\$3,600} + \text{\$14,400} - \text{\$3,000} = \text{\$241,800}$$

Although the fair value of the investment is only \$217,800, no information is provided to indicate there has been a permanent impairment in the investment's value. Because of this and the fact that this investment is not measured at fair value, no adjustment to its fair value is required.

(b)

Partial Statement of Financial Position, December 31, 2014

Long-term Assets

Equity Investments, at fair value with gains and losses in OCI	\$ 21,000
Investment in associate company, at equity	241,800

Shareholders' Equity

Accumulated other comprehensive income (loss)	\$ (600)*

$$(-\$2,700 + \$1,675 - \$1,000 + \$1,425) = -\$600$$

Proof: Cost of 3,000 shares of Growthpen:

3,000/4,000 X \$28,800 =	\$21,600
Fair value, Dec. 31/14	<u>21,000</u>
Unrealized loss in AOCI	<u>\$ (600)</u>

PROBLEM 9-13 (Continued)

(c)

Investment income accounts included in net income:

Investment income on FV-NI investments (\$19,200 + \$51,188)	\$70,388
Dividend revenue on FV-OCI investments	3,000
Interest income on amortized cost investments (\$8,698 + \$4,333)	13,031
Loss on sale of investment in bonds	(9,258)
Equity in income of associate company (\$14,400 - \$3,000)	11,400

Statement of Comprehensive Income Year ended December 31, 2014

Net income	\$1,422,600
Other Comprehensive Income Items that will not be reclassified to net income:	
Holding gains on investments (\$1,675 + \$1,425)	\$3,100
Transfer of realized gains to retained earnings	<u>(1,000)</u> <u>2,100</u>
Comprehensive Income	<u>\$1,424,700</u>

Note:

AOCI, December 31, 2013	\$(2,700)
OCI, year 2014	<u>2,100</u>
AOCI, December 31, 2014	<u>\$(600)</u>

PROBLEM 9-13 (Continued)

(d)

Most assets are carried at cost in the accounts of companies, and no gains or losses (unless they are impaired) are recognized in the accounts until they are sold or disposed of; that is, until the gain or loss is realized in cash.

Some asset investments, however, are adjusted to their fair value at each reporting date. The difference between the investment cost and its fair value (a gain or loss) is unrealized at the balance sheet date. Because the change in value is unrealized, it is accumulated in the AOCI account instead of included in net income. Therefore, the amount in accumulated other comprehensive income is the net amount of the difference between these assets' cost and fair value at the balance sheet date.

(Note that there are some, usually very marketable investments that a company buys to make short term profits, that are also remeasured to fair value, but these unrealized gains and losses are included in net income. This is mainly because the company intends to sell or dispose of them in the short term.)

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

CA 9-1 INVESTMENT COMPANY LIMITED (ICL)

Overview:

Private company – therefore, no legal GAAP constraint. The bank, who is looking at lending the company money, might want GAAP statements since they are relevant and reliable. Owners might also want GAAP statements so that they can assess stewardship of the two managers. The company may follow ASPE or IFRS. The bank may want one or the other. Both will be considered in the analysis.

As the accountant, you will want to provide the bank with useful information to secure the loan to expand.

CA 9-1 (Continued)

Analysis and Recommendations:

Issue: How to account for IA.

Significant influence	At cost or fair value
- At least two owners interested in holding onto shares for the longer term and therefore, could be long term investment. - Supported by interchange of technology (company uses lab equipment), representation on Board (1 out of 3 represents significant influence), interchange of managerial personnel (owner hired as consultant – therefore may influence). - Use equity method if significant influence. Record at cost and recognize pro-rata share of income/losses. - Other.	ASPE- 15% does not usually represent significant influence as it is below the 20% threshold. - Investments in equity shares are generally carried at cost under ASPE unless there is significant influence or unless the shares are quoted in an active market (these do not appear to be). - Under IFRS the investment may be carried at FV-NI or FV-OCI. It may make sense to use the former if they plan to trade them. It appears as though at least 2 of the owners would like to hang onto the shares for the longer term so perhaps FV-OCI makes more sense. - Other

Conclusion: the involvement of the owners would appear to indicate significant influence exists and therefore, the equity method should be used.

Issue: How to account for IB.

Under ASPE would be carried at cost for the same reasons as IA above. Under IFRS, would be carried at fair value (as noted above using either FV-NI or FV-OCI). Note that these are preferred shares and therefore would not be accounted for under the equity method. Given that they will be resold in the near term, FV-NI may make the most sense. The fair value is known – making it easy to measure.

CA 9-1 (Continued)

Issue: How to account for IC.

Likely significant influence investment since 25% ownership, however, we need to consider the actual interrelationship of ICL's management and board with the management and board of directors of IC before making this decision. It would appear that there is an impairment in the value of this investment. If the \$10,000,000 is written off by IC, ICL's share is \$2,500,000. Using the equity method as required under IFRS, this would wipe out the carrying value of the investment and may create a liability. Even though IC's financial statements will not be prepared for another 2 months, you should still consider this information. It would appear to be a non-temporary decline, since it affects a drug which was meant to provide 50% of the profits of the company going forward.

Should a liability be created? Only if ICL is committed to making up the cash shortfall, is on the hook to make up cash shortfalls, or if a turnaround is imminent. There is no evidence of any of these, therefore, using the equity method should result in writing off the investment not creating a liability. The loss should be treated as an unusual item due to its size. (It is typical since this is an investment company and therefore investment losses are a normal risk). This will allow greater predictability for the bank, i.e., if a loss of such a size would not be expected to recur. IFRS is essentially the same, requiring losses to be recognized where there is a legal or constructive obligation.

Alternatively, if the ICL managers and owners cannot significantly influence the policies and operations of the management and board of IC (which may be quite likely), the equity method cannot be used under either ASPE or IFRS. Under ASPE, ICL would likely account for the investment at cost (along with recognizing an impairment loss) as IC is a private company without a reliable FV share price. Under IFRS, it is likely that the shares would be measured at fair value, even though there may not be an active market price. In either case, a loss in FV would have to be recognized—reported in net income if a FV-NI approach is chosen, or in OCI if a FV-OCI approach. In the latter case, the loss would have to be recycled and be reported through net income as well.

Because the owners of ICL have employed managers to manage their investments with a view to maximizing their return on investment (an assumed but very likely objective), it is likely that they would prefer full FV valuation for ICL's assets. However, because the investments are in smaller private companies instead of publicly traded entities, the owners might very well prefer reliable cost measures instead.

CA 9-2 CANDO COMMUNICATIONS (CC)

Overview:

CC is a conglomerate with investment in many companies. As an analyst, care should be taken to ensure that the accounting reflects the true nature of the business relationship and that it assists in predicting future cash flows which are used in valuing a company.

Net income is down substantially (\$42 million lower than prior year) even though revenues are up 15%. Care should be taken to ensure that aggressive accounting has not been used to mitigate the impact of the loss. IFRS is a constraint since the company is a public company.

Note that all of the investments appear in line with the company's main business of operating in the telecommunications industry and unless otherwise noted, would be assumed to be long term investments.

Analysis and Recommendations:

Issue: Investment in Australia TV

Significant Influence	Subsidiary
- Own 15% of the investment which is close to the 20% benchmark. - Has representation on the board in the amount of 3 out of 12 – which does not indicate control – only influence (perhaps not even that). - Other.	- % share ownership along with the convertible debentures yield effective control. If the debentures were converted, the company would have approximately 50% of the shares which is equal to control in terms of voting rights. - If a subsidiary – will consolidate 100% of the assets, liabilities, revenues, and expenses – which gives a better picture of what net assets are under the control of CC. - Other.

CA 9-2 (Continued)

Conclusion: Likely a subsidiary, because of the potential to exercise control. Consolidation provides greater transparency in terms of the underlying business. (Note: IFRS 10.B47 indicates that potential voting rights as well as existing voting rights are considered by the investor in determining whether there is control if the potential voting rights are substantive.)

Issue: Investment in Ulster TV

Even though Cando has almost a 30% equity interest in UlsterTV, it appears that it cannot exercise any influence over the activities of the investee company. Therefore, the equity method of accounting is not appropriate. The accounting issue is whether this investment should be carried at fair value with changes in value being recognized in net income, or whether changes in value should be recognized through OCI.

Issue: Investment in Ulster TV

FV-NI	FV-OCI
- If Cando expects to hold this investment for the short term and will likely realize any gains or losses in the investee's fair value, net income treatment would be a better predictor of future cash flows and the effect on Cando of changes in the FV of UlsterTV. -If Cando's management affects the performance of UlsterTV, changes in its value would be more appropriate if recognized in net income and its EPS - Other.	- If Cando expects to hold this investment for strategic purposes in the longer term, so that the variability in the investee's fair value is not expected to be realized, OCI treatment would produce a better result. The current fair value of the investment is provided, but the variability does not affect net income or EPS. -If Cando does not influence the economic performance of UlsterTV, including changes in its FV would introduce "noise" to the net income number that is not warranted. -Other.

Conclusion: Because it appears that Cando does not have any effect on UlsterTV's performance and its future prospects at this point, changes in FV would be better reported outside of net income – that is, in OCI.

CA 9-3 IMPAIRED INVESTMENTS LIMITED (IIL)

Overview:

- Since the company is considering going public, they should prepare GAAP financial statements. They have decided to adopt IFRS including adopting IFRS 9. ASPE
- It would appear that the investment values may be in question.
- As controller, would want to ensure transparency but may be a bias to show current shareholders that the investment decisions made were good ones. Care should be taken to ensure that this bias does not creep into the financial statements.

Analysis and Recommendations:

Issue: Bond investment

- The bond investment would be carried at amortized cost where the intent is to hold to contractual maturity and the instrument is debt-like (appears to be the case since structured as a bond with interest payments). There is no indication of the intent of management so this would have to be determined.
- Where there is objective evidence of impairment of the bond, it would be written down. In this case, the change in interest rates in the market place are not significant enough evidence of impairment as they appear to be due to general economic factors in the marketplace and not specific problems related to this instrument. The evidence is vague as to whether there is objective evidence of a decline in value.
- Therefore do not write-down.

Issue: Common shares A

- The company has a choice under IFRS 9 to classify these shares as FV-NI or FV-OCI. This is an accounting policy choice. As long as the shares are not actively traded, either method is acceptable.
- If the entity chooses FV-OCI – this is an irrevocable election. Amounts in OCI are not subsequently transferred to net income.
- If the entity chooses FV-NI all gains and losses will flow through net income and introduce volatility.
- There is no need to worry about impairment for this asset since it is already marked to fair value with gains/losses being booked to income. The accounting policy choice (FV-NI or FV-OCI) will affect the accounting for impairment on a going forward basis however.

CA 9-3 (Continued)

Issue: Common shares B

- The company has a choice under IFRS 9 to classify these shares as FV-NI or FV-OCI. This is an accounting policy choice.
- If the entity chooses FV-OCI – this is an irrevocable election. Amounts in OCI are not subsequently transferred to net income (including impairment losses).
- If the company chooses FV-OCI – all gains and losses will be reported outside of net income. It looks like the investment may be declining in value but the controller believes this is temporary.
- Whether IIL should choose FV-NI or FV-OCI for these investments (and for the investment in shares of Company A) depends on how the financial statement information will be used. If management is to be evaluated on the performance of the investments – bot dividend/interest income and changes in the fair value of the investment holdings, the FV-NI choice for both may be better. If the intent is to hold these shares for the longer term, perhaps for more strategic purposes, the FV-OCI choice would probably be better.

Note that the IASB is currently working on changes to IFRS regarding impairments. Note further that IFRS 9 is not in effect until 2015 and since FASB is currently reviewing these same issues, there may be some changes to the accounting. However, early adoption is permitted.

IC9-1 EMI Inc.

As a corporation EMI is now operating with a different business model and is undertaking new investments. These complex transactions may increase EMI's risk of misstatement from misapplied accounting policies.

The equity analyst will use the financial statements for financial analysis, particularly to determine the economic performance of the company and its new strategy. Has the new strategy provided opportunities for increased cash flows to investors in the future? Is the company earning more on these investments than the investors could if the cash had been distributed to them directly? Analysts will want the financial statements to be prepared with transparency and based on substance over legal form.

Other users will be EMI's shareholders and board of directors. These users will review the financial statements to evaluate management, in addition to the prospects for future cash flows.

EMI is a public company and therefore must use GAAP financial statements in accordance with IFRS for financial reporting purposes.

IC9-1 (Continued)

Issue - EMI's investment in ABC

Significant Influence	Consolidation
-EMI only owns 40% of the voting shares of ABC which does not imply legal control -EMI has only one of twelve seats on the board of directors providing it with the ability to influence but not control ABC's operations -ASPE allows for a choice of the equity or cost method of accounting, however, as the shares are traded on the public market, cost is not applicable -IFRS requires the equity method	-The remaining 60% ownership of ABC shares are widely held -EMI is a guarantor for ABC's outstanding debt and has the right to use ABC's fixed assets as collateral -EMI's two executives participate in ABC's strategic committee -In substance EMI has the risk and rewards of control and has the ability to control ABC's strategic and financial operations -IFRS requires consolidation -ASPE allows for a choice of equity or cost - as the shares are traded on the public market, cost is not applicable -EMI would be required to show the minority interest (non-controlling interest) in both its income statement and balance sheet

EMI should consolidate its investment in ABC because of its ability to control ABC's resources despite not having legal control.

IC9-1 (Continued)

Issue - Corporate bonds

Amortized Cost Model	Fair Value - NI (FVTPL)
-Management has stated its intention of holding the investment for long-term interest earning (cash flow) purposes signaling the investment will be held to maturity (HTM). EMI also has the financial ability to hold the investment to maturity. A HTM investment must be measured using the amortized cost model. - For HTM investments, IFRS requires that the interest is recognized using the effective interest rate method -ASPE - permits interest to be recorded using the straight line or effective method	-Historically EMI has always purchased corporate bonds for short-term trading which would be accounted for as a held for trade investment (HFT). -A HFT investment must be measured using fair value - with the investment adjusted to fair value at the end of each reporting period. All unrealized gains/losses and interest earned is reported in net income -Under ASPE, the fair value option can be used to account for the investment at FV-NI.

EMI should account for the corporate bonds as a HTM investment given management's intention for the investment. Interest should be recorded using the effective interest method as shown below in the amortization table below.

IC9-1 (Continued)

6% Corporate Bonds Purchased to Yield 8%				
	Cash Interest	Interest Income	Bond Discount Amortized	Amortized Cost of Bonds
1/1/2014				\$ 94,758
7/1/2014	\$ 3,000	\$ 3,790.31	\$ 790.31	95,548
1/1/2015	3,000	3,821.93	821.93	96,370
7/1/2015	3,000	3,854.80	854.80	97,225
1/1/2016	3,000	3,889.00	889.00	98,114
7/1/2016	3,000	3,924.56	924.56	99,038
1/1/2017	3,000	3,961.54	961.54	100,000
	\$18,000	\$23,242.14	\$ 5,242.14	

Journal entry - upon inception 1/1/2014

Dr. Bond Investment at Amortized Cost	94,758	
Cr. Cash		94,758

Journal entry - to record the first receipt of interest on July 1, 2014

Dr. Cash	3,000.00	
Dr. Bond Investment at Amortized Cost	790.31	
Cr. Interest Income		3,790.31

IC9-1 (Continued)

Issue - Portfolio investment

FV NI) Model	Cost Model
-In the past management has held similar portfolios for the purpose of holding to trade and earn short-term profits -Transaction costs are expensed -Changes in FV (unrealized changes) are recognized through net income -Each portfolio must be re-measured to FV at each balance sheet date	-Management has not explicitly stated its intention to hold only for the short-term -Transaction costs are added to the cost base -Changes in FV are not applicable and adjusted for -IFRS - the cost method is used for the portfolio of equity instruments for which fair value is not measurable -ASPE - the cost method is used for the portfolio of equity instruments with no quoted market price

Note that the investments in Portfolios A and B are relatively minor in relation to the company's total assets.

Portfolio A should be measured using the FVTPL model (FV-NI) however, Portfolio B must remain at cost because there is no quoted market price. The 2% transaction costs for Portfolio A must be expensed. Transaction costs for Portfolio B must be added to the cost base. Portfolio A must record an investment loss to bring the portfolio to its fair value at the end of the year.

Journal entry - to adjust to fair value - December 31, 2014.

Dr. Unrealized Gain or Loss	5,778	
Cr. FV-NI Investments		5,778

Because the 3% investment in Portfolio B is in a movie theatre, EMI management might decide to follow a different strategy for this investment. This may be just the beginning of an increased interest later, so that EMI might have a more strategic plan for this investment. The accounting method and strategy should be monitored going forward, Accounting for this investment at FV with changes going to OCI may be an option, although for now, the immateriality of the investment gives EMI management some time to determine what their longer term plans are.

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 9-1 (Time 15-25 minutes)

Purpose—to determine the type of investment in a company's financial statements. The student must discuss the rationale for the reporting standards for holdings with control and determine what other evidence of holdings with control would be shown on the financial statements.

WA 9-2 (Time 20-25 minutes)

Purpose—to provide the student an opportunity to review the different classifications for debt and try to apply the classification criteria to a variety of different debt instruments.

WA 9-3 (Time 25-30 minutes)

Purpose—to determine the accounting recognition and measurement for five different types of equity instruments under IFRS and ASPE and determine the impact on the statement of financial position and statement of earnings.

WA 9-4 (Time 15-25 minutes)

Purpose—to allow the student an opportunity to discuss the accounting for an investment with significant influence under IFRS and ASPE

WA 9-5 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to compare and contrast the “expected loss model” and the “incurred loss model” for impairment tests.

WA9-6 (Time 20-30 minutes)

Purpose—this writing assignment provides an opportunity to reinforce the major differences between IFRS and private enterprise accounting standards, and to relate the differences to the conceptual framework.

WA 9-7 (Time 15-25 minutes)

Purpose—to give the student an opportunity to discuss the various impairment loss models and compare the benefits and disadvantages of each. The student is asked to provide insight to which model provides the most transparent and relevant information to users.

TIME AND PURPOSE OF WRITING ASSIGNMENTS (Continued)

WA 9-8 (Time 10-15 minutes)

Purpose—to provide the student an opportunity to discuss and compare the objectives of the disclosures of financial instruments under both IFRS and ASPE.

WA 9-9 (Time 15-25 minutes)

Purpose—to give the student an opportunity to discuss the financial presentation of various financial investments and consider the benefits such an investment would have to a purchasing company.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 9-1

- (a) Vixen likely holds investments in subsidiaries. Investments in subsidiaries usually involve acquiring a voting interest of more than 50% in another corporation's shares, and controlling the subsidiary's net assets and operations. When financial statements are prepared for holdings with control, the statements of the parent company and the subsidiary are presented on a consolidated basis. This means that instead of reporting the investment in the subsidiary as a one-line long-term investment, the parent replaces the investment account with the subsidiary's assets and liabilities over which it has control (on a line-by-line basis).
- (b) This type of investment disregards the distinction between separate legal entities and treats the parent and subsidiary corporations as a single economic entity. Since the parent company controls the subsidiary through voting control and board of directors' representation, consolidation of the financial statements of the parent and subsidiary is considered to more accurately represent the substantive economic relationship between the companies.
- (c) Other evidence to indicate this type of investment would include the title of the financial statements. The title must refer to "consolidated" balance sheet, income statement, etc. In addition, if applicable, the balance sheet would show a non-controlling interest representing the percentage of the net assets not owned, reported as a portion of the equity on the balance sheet (under the new rules). (Under previous Canadian GAAP, the non-controlling interest was reported after the liabilities and before the equity section on the balance sheet.) The income statement will indicate how much of the net earnings has been allocated to the "non-controlling interests" and to "the parent".

WA 9-2

- (a) Yes, Nottebart is correct. Under IFRS 9, debt instruments must be measured at amortized cost if both the business model test and the contractual cash flow test are met. If a debt instrument does not meet these criteria, then it must be measured at fair value through profit or loss. The ethical accountant would need to communicate this to Abernathy and then determine whether the debt securities meet the criteria to be measured at amortized cost or not.
- (b) For each of the following, the business model test and the cash flow characteristic test are applied to see if the debt instrument meets both criteria. If one of the criteria is not met, the debt investment must be recorded at fair value through net income.
1. The bond instrument has contractual cash flows that are solely principal and interest based on the principal amount outstanding. Although the interest to be received will vary depending on the prime bank lending rate, the cash flows still reflect the time value of money and the credit risk associated with the investment. Therefore, the cash flow characteristic is met. However, Addison does not generally keep these investments to maturity so its business objective for this investment is to realize its fair value change from its sale rather than maturity. Given this, the business test is not met, and the instrument will be recorded at fair value. Any changes in the fair value will be recorded in net earnings.
 2. Addison would determine whether or not the bond was worth more converted into shares of Exxon or as a bond that continues to pay interest at 5%. Consequently the cash flows of the bond do not just reflect payments of interest and principal. The return on this bond would also be linked to the underlying shares of Exxon. It is also unknown if the company will hold the bond to maturity since the price of the Exxon shares may reach \$55 prior to maturity. Therefore, this bond is recorded at fair value, with changes in fair value recorded in net earnings.

WA 9-2 (Continued)

3. The only cash flows to be received on this bond are principal and interest. The interest is linked to an inflation index which, in reality, provides a “real” rate of interest. Therefore, the interest payments would be consideration for the time value of money and credit risk. Consequently, the cash flow characteristic test is met. In addition, the business objective of the company is to hold this bond until maturity and receive the regular interest payments and principal amount at the time of maturity. As a result, the business test is also met. Since both tests are met, this debt instrument would be recorded at amortized cost. Interest would be recorded based on the effective rate of interest as earned.
4. For this perpetual bond, the question is whether the contractual cash flows of the bond are solely linked to interest and principal payments. In this case, the bond may be called at any point, and the face value will be paid. In addition, the interest may not be paid, if Resource would fail certain solvency tests. Consequently, the interest payments are not consideration for just the time value of money on the principal amount outstanding, but are impacted by other factors. Even though the business test is met, in that Addison expects to hold the bond in perpetuity, the cash flow characteristic test is not met. The bond must be recorded at fair value with changes in fair value through net income. The interest, based on the effective rate, would still be recorded as interest income.

WA 9-3

- (a) Under ASPE, the company uses the cost/amortized cost method for all investments, except for equity investments that are quoted in an active market. However, an entity does have the option to classify any financial asset at FV-NI, if it so wishes.

Situation 1 Term deposits are to be reported at amortized cost since the deposits do not represent an equity investment. As the term deposits are due in six months, these investments would be classified as current assets. Andrelli also has the option to designate this investment at fair value, at the time of initial recognition. Any interest earned on the term deposits will be reported on the income statement.

Situation 2 The shares in a private company are not publicly traded and therefore do not have a quoted market price. Consequently, these shares would be recorded at cost on the balance sheet, likely as non-current assets, assuming that the company will hold onto this investment for more than 12 months. Since the company only owns 10%, there is no indication that Andrelli has any significant influence over the investment, so the equity basis would not be a possible choice. Although Andrelli has the option to record this at fair value, since there is no quoted price, the determination of fair value would likely not be possible. Any dividends received on this investment would be reported in the income statement when earned.

Situation 3 The corporate bond is not equity and will be reported at amortized cost on the balance sheet, as non-current. The interest earned based on the bond's effective interest rate will be reported on the income statement. Andrelli does have the option of using the straight-line method of amortizing any discount or premium. Again, Andrelli has the option to record this bond investment at fair value through net income, but the choice would have to be made on initial recognition of the investment.

WA 9-3 (Continued)

Situation 4 These money market funds are cash and near cash items, mostly with fixed cash flows, and with fixed maturity dates, but are held for trading purposes in order to earn some return on otherwise idle funds. Consequently, these investments would be recorded at cost, but with such short maturities, cost plus any accrued interest would approximate their fair value. Many of these investments would likely be reported as cash and cash equivalents and others as trading investments – both in current assets. The investments could be valued using the FV option, but because of the closeness of cost plus accrued interest to FV, the FV option is not likely to be used.

Situation 5 The investment would be accounted for using the equity method of accounting given that there is an indication of significant influence. The investment account would be increased annually by the investor's share of the investee's net income (\$20,000). A proportionate share of the investee's net income would also be recorded as investment income in current earnings. Dividends received on this investment would be recorded as a reduction directly against the investment account. The investment on the balance sheet would be shown at its carrying value which would be equal to the original investment cost adjusted for investor's share of net income and dividends.

Alternatively, under ASPE, Andrelli would have the choice of accounting for the investment at FV-NI if the supplier's shares were traded in an active market. If not actively traded, the company could choose the cost method.

- (b) Under the new IFRS 9 standard, the company uses the cost or amortized cost method for all debt investments if the company expects to hold the investment to collect the contractual cash flows and these cash flows are paid on specific dates and related solely to principal and interest payments. An entity may designate such an investment as fair value through net income if that designation eliminates an accounting mismatch. Generally, all other investments are recorded at fair value through net income. However, an entity does have the option to classify an equity investment as FV-OCI, when the shares are not held for trading purposes.

WA 9-3 (Continued)

Situation 1

The company invests excess cash in the term deposits and holds these until maturity. The investments pay a fixed cash flow and payments consist of principal and interest. This investment meets the two criteria as follows: the business model test is met since the company holds the investment to collect the cash flows; and the contractual cash flow characteristic criteria is met since the cash flows are based on principal and interest payments. Consequently, the term deposits are reported at amortized cost. Since the term deposits are due in six months, these investments would be classified as current assets. Andrelli also has the option to designate this investment at fair value, at the time of initial recognition if management believes that there would be an accounting mismatch, which in this case would be unlikely. Any interest earned on the term deposits will be reported on the income statement as earned.

Situation 2

The shares in a private company are not publicly traded and therefore do not have a quoted market price. Under IFRS, these shares must be recorded at fair value, with any changes in fair value recorded directly to net earnings. In this case, if Andrelli cannot determine the fair value of this investment, cost might be considered the best estimate of fair value. However, Andrelli would also have to consider if cost is still representative of fair value if there has been a significant change in the performance of Warren. These shares would be recorded at cost on the balance sheet, likely as non-current assets, assuming that the company will hold onto this investment for more than 12 months. Since the company only owns 10%, there is no indication that Andrelli has any significant influence over the investment, so the equity basis would not be a possible choice. Any dividends received on this investment would be reported in the income statement when earned. The company has a final choice to record this investment as FV-OCI, since it is an equity investment not held for trading. In this case, any changes in fair value that might arise would be booked directly to other comprehensive income and not net earnings. However any dividends would still be recorded to net earnings.

WA 9-3 (Continued)

- Situation 3** It appears that Andrelli expects to hold this bond until maturity. Does the investment meet the business model test and the cash flow characteristic test? The business model test is met since Andrelli will not be selling the bond prior to its maturity. The cash flow characteristic test is met since the cash flows are based on principal and interest payments only. As a result, the corporate bond is reported at amortized cost on the balance sheet, as non-current. The interest earned, based on the bond's effective interest rate, will be reported on the income statement as earned. Again, Andrelli has the option to record this at fair value through net income, if they believe there would be an accounting mismatch, which does not appear to be indicated in this example.
- Situation 4** These money market funds are near cash items, most with fixed cash flows, are interest bearing and have fixed maturity dates. They would likely be accounted for at cost plus accrued income which would approximate fair value. Many of these investments would likely be reported as cash and cash equivalents and others as trading investments – both in current assets.
- Situation 5** The investment would be accounted for using the equity method of accounting given that there is an indication of significant influence. The investment account would be increased annually by the investor's share of the investee's net income (\$20,000). A proportionate share of the investee's net income would also be recorded as investment income in current earnings. Dividends received on this investment would be recorded as a reduction directly against the investment account. The investment on the balance sheet would be shown at its carrying value which would be equal to the original investment cost adjusted for investor's share of net income and dividends.

WA 9-4

(a) Under IFRS:

Memo to: Chief Accountant
From: Student
Subject: Accounting treatment to be accorded investment in
Huber Corporation

Munns Inc. should follow the equity method of accounting for its investment in Huber Corporation because Munns Inc. is presumed to be able to exercise significant influence over the operating and financial policies of Huber Corporation due to the size of its investment (i.e. 25%). (The existence of significant influence should be confirmed.) The accounting method used to account for its investment (i.e. the Equity Method) should be disclosed in the Notes to its Financial Statements.

In 2014, Munns Inc. should report its interest in Huber Corporation on the balance sheet as a long-term investment. Following the equity method of accounting, Munns Inc. should record the cash purchase of 25 percent of Huber Corporation at acquisition cost. Subsequently, its carrying value will be adjusted each period for Munns' share of the changes in Huber's net assets. Separate disclosure on the balance sheet (or in the notes) is required of the investment category used.

Twenty-five percent of Huber Corporation's total net income from July 1, 2014, to December 31, 2014, should be added to the carrying amount of the investment in Munns' balance sheet and shown as income in its income statement to recognize Munns' share of the net income of Huber Corporation after the date of acquisition. This amount should reflect adjustments similar to those made in preparing consolidated statements, including adjustments to eliminate intercompany gains and losses, and to amortize, if appropriate, any difference between Munns' cost and the underlying equity in net assets of Huber Corporation on July 1, 2014. Further, the classification of the income should follow the classification used by Huber (such as discontinued operations, other comprehensive income, etc.).

Disclosure is also required of any difference between the balance of the investment account and Huber's net book value, with an explanation of the accounting treatment being used to account for the difference.

The cash dividends paid by Huber Corporation to Munns Inc. should reduce the carrying amount of the investment in Munns' balance sheet and have no effect on Munns' income statement.

WA 9-4 (Continued)

Disclosure in the notes would also include the fair value of this investment since it is publicly traded and the share price is quoted in an active market. Additional disclosure required under IFRS would include summarized information about Huber's assets, liabilities, revenue and net income, and any relevant contingent liabilities that may affect Munns.

- (b) Under ASPE, Munns would have the choice to use the fair value approach instead of the equity method if Huber Corporation's shares are actively traded. Using this method, Munns would record the initial investment in Huber at cost (FV at acquisition). For the 2014 reporting year, the dividends received would be reported as income in the income statement. There would be no adjustment for any portion of Huber's net income. Gains and losses in FV would be recognized in income.

If Huber's shares are not actively traded, Munns could also account for its investment in Huber using the cost method.

The disclosure required under ASPE (for both the equity and cost methods) would include a description of the investment, the name of the company, the carrying amount of the investment and the percentage of ownership held. If the cost method was used, Munns would also be required to disclose separately this investment where it has significant influence but is using the cost method for reporting purposes.

WA 9-5

- (a) Under the incurred loss method, the original investment is recorded using expected future cash flows, ignoring expected future credit losses. In this case, the bond would be recognized at \$1 million and an effective interest rate of 5% would be used. In the case of the expected loss model, the initial carrying amount of the debt investment is the present value of the future cash flows, which have been adjusted for expected future credit losses. In this case, the bond would be recorded at \$1 million but the effective interest rate used would be 4.2%, based on a rate adjusted for the estimated future credit losses.
- (b) Under the incurred loss method, an event will trigger the impairment test. Examples of triggering events would be where the debt issuer has experienced significant difficulties, has defaulted on interest or principal payments, or is likely to restructure its debt or enter bankruptcy protection. Any impairment loss will be recognized at the time of this triggering event. In the expected loss model, there is no triggering event, since the future credit losses are already incorporated into the expected cash flows in determining the value of the investment. Under this method, any impairments are automatically recognized as unfavourable changes result in the future expected credit losses and the cash flows are re-estimated, causing the value of the debt investment to fall below its carrying amount.
- (c) The revised carrying amount, under the incurred loss method, is measured using the present value of revised amounts of cash flows discounted at either the interest rate originally (5%) used to measure the debt instrument when it was initially recorded, or the current market rate. Under the expected loss model, the carrying amount is revised using updated cash flows which also include future credit losses, discounted using the original effective interest rate (i.e. the effective interest rate at acquisition that incorporated the expected credit losses at that time) of 4.2%. The impairment loss is the difference between the carrying amount and the revised amount as described above. The impairment loss is recorded in net income in the period it arises.
- (d) Under the incurred loss method, the impairment would be reversed when a later event triggered that losses would no longer be incurred. Under the expected loss method, these reversals automatically are reversed when there is a favourable change in the future expected credit losses.

WA 9-6

The topic of financial instruments is extremely complicated, and consequently, this was one area that ASPE, in its original design, wanted to significantly reduce the complexity. Additionally, private enterprises usually have more simple types of financial assets and liabilities. Finally, this is also an area that has required extensive qualitative and quantitative analysis of all the risks that a company faces. Consequently, ASPE tries to reduce the required disclosure for financial instruments.

With respect to financial instruments where there is no significant influence or control, the main differences between ASPE and IFRS relate to the number of choices available for reporting and measuring these assets, and for reporting the gains and losses on these assets. As we can see below, ASPE has made the alternative models simpler and more understandable.

- Under ASPE, the financial instruments are measured at cost or fair value and the enterprise can designate an item to fair value if they wish. If at fair value, all gains and losses are reported immediately to the profit or loss. There are no “other comprehensive income items” (OCI) allowed under ASPE. Under IFRS, there is a third choice allowed where the gains and losses can be reported as part of OCI for certain investments.
- ASPE simplifies the cost model by allowing the enterprise the choice of using the straight-line method (the simpler method) or the effective interest method to report income earned on investments. IFRS requires the effective interest method to be used.
- The determination of fair values for impairment testing is again simpler for private enterprises, where the future cash flows are discounted using the current required rate of return. Alternatively, estimated proceeds on sale can be used. Under IFRS, more complex models for determining fair value are required, including use of the original effective interest rate for discounting future cash flows.
- Finally, the area of disclosure is limited for private enterprises.

WA 9-6 (Continued)

For strategic investments, ASPE allows many choices on how complex the reporting is – allowing a choice of consolidation, equity or cost method of reporting of subsidiaries; or equity or cost method for significantly influenced investments. The only stipulation is that if the shares are quoted in the market place, then the cost model cannot be used, but the company can use the fair value model as an alternative. Since use of consolidation or the equity method is extremely complicated, many private enterprises opt for using the cost method of reporting. IFRS allows no choice in the reporting and measuring of these investments; subsidiaries are consolidated and significantly influenced companies require the equity method. Finally, the disclosures required under ASPE relate to the alternative used, whereas IFRS requires more extensive disclosures on the nature of the investments and the impact on the company's reports.

WA 9-7

An investment is recognized as impaired when there is not reasonable assurance that the future cash flows associated with the investment will be collected on time or in the full amount, under the incurred loss model. To determine when there is not reasonable assurance of the future cash flows, a triggering event that would impact the amount or timing of future cash flows is considered. Examples of triggering events include when the investee has been late making payments, significant negative economic conditions exist, and the investee is experiencing significant financial difficulty and potential bankruptcy. If a triggering event does occur, impairment is recognized. The investment will be valued at the estimated realizable amount, which is calculated using the revised payments and interest rates or the net proceeds that would be received from collecting collateral or the realizable amount from selling the investment. Interest income on the impaired investment is recognized based on the discount rate used in calculating the present value of cash flows from the investment. Changes in net realisable value of the investment are recognized when they occur (which would be noted with a triggering event)

The benefit of the incurred lost model is that an impairment is recognized and measured at the balance sheet date only when there has been a specific triggering event. Therefore, the cost of measurement is lower, and the amount of the loss is based on objective information. A weakness of this model is that it only recognizes the losses that have been incurred at that point rather than continuously measuring the loss.

WA 9-7 (Continued)

The expected loss impairment model is continuous and estimates the expected future cash flows from an investment throughout the period. The recognition of impairment for investments under this model does not depend on a triggering event; instead impairment is recognized based on changing cash flow projections. The discount rate stays at the same effective interest rate that the instrument was initially measured with so the measurement of the investment is cost-based. The impairment loss is recognized as the difference between the carrying amount and the revised present value of cash flows. Interest income after an impairment is recognized, is based on the original effective interest rate. Since cash flows are continuously estimated this model recognizes impairments that have been incurred to date as well as future expected losses.

The benefit of the expected loss impairment model is that impairment losses (or the reversal of losses) are recognized sooner under this model which improves the quality of the information. Transparency is improved with this model since users are provided with information as soon as it is available rather than only at the end of the period. The weakness of the expected loss model is that it is both costly and difficult to consistently measure the estimated future cash flows from an investment.

The upcoming IFRS proposals will require that all instruments valued at amortized cost use the expected loss model as opposed to the incurred loss model, primarily because this model provides more transparent information to users.

WA 9-8

One of the objectives of financial instrument disclosure is to communicate to users the significance of financial instruments to the financial position and performance of the company. The requirements to disclose carrying values and any impairment allowances supports this objective since the user can clearly see how significant the value of financial instruments are compared to the company's total balance sheet.

WA 9-8 (Continued)

Another objective is to explain the risks an entity is exposed to as a result of their financial instruments. Impairment losses and reversals must be disclosed by the company, which indicates some of the risks relating to the financial instruments and the losses or gains they have experienced. Disclosure of financial risks relating to investments and their changes over time also supports this objective.

The third objective of disclosure is to ensure companies describe their risk management strategies. IFRS specifically has provisions for the disclosure of management strategies for financial risks to address this objective.

WA 9-9

- (a) This is an equity investment since the income earned from the investment is in the form of dividends and partial ownership interests. The investor does not receive interest payments but may benefit from not only the dividends but also the appreciation of the capital investment if the company is profitable. There are several reasons a company may choose an equity investment. An equity investment that pays dividends provides the investor with both short-term returns through the dividend payments and potential long-term returns. As well, the investor company may have strategic reasons for an equity investment including developing a relationship with the investee company or being able to influence the investee company's operations.
- (b) The loan represents a debt security as the loan gives the investor rights to interest and principal repayment. A company may choose a debt security as a method to earn income on available capital by charging interest. Providing a loan to another entity allows the company to predetermine its cash flow from the capital by setting interest rates and payment schedules which may provide a less risky return compared with an equity interest.

WA 9-9 (Continued)

- (c) This loan includes a convertible feature that allows the investor to convert the loan into common shares of the investee. This is a convertible instrument with both a debt and an equity component. This option provides the low risk secure return from a loan but gives the investor flexibility and the potential to experience greater long-term returns if the investee is successful and they choose to convert to shares.

RESEARCH AND FINANCIAL ANALYSIS

RA 9-1 Shoppers Drug Mart

- (a) Shoppers Drug Mart has investments in subsidiaries as evidenced by the Consolidated Financial Statements presented. Further, Note 1 indicates that the consolidated financial statements include accounts of the Company and its subsidiaries. As indicated in Note 3 (a), the company wholly owns all of its subsidiaries and as a result they are fully consolidated without a non-controlling interest.

It does not appear that Shoppers has any investments in associated companies. However, it does have Associate-owned stores over which it exercises significant influence and records a related liability on the balance sheet. The company records its interest in Associate-owned stores under IAS 27, specifically note 3(u) and explains that Associate interest is recorded to show the agreement that Shoppers has with associates to purchase their store assets at carrying value upon termination of the associate agreement. The liability shown on the balance sheet is the obligation of Shoppers to buy these assets.

- (b) Shoppers does have investments in Subsidiary companies. As described in Note 29, the company owns 100% of The following companies:
- Shoppers Home Health Care (Canada) Inc.
 - Shopper Drug Mart Specialty Health Network Inc.
 - MediSystem Technologies Inc.
 - Shoppers Drug Mart Inc.
 - Shoppers Drug Mart (London) Limited.
 - Pharmaprix Inc.
 - 911979 Alberta Inc.
 - Shoppers Realty Inc.
 - Sanis Health Inc.

RA 9-1 (Continued)

Shoppers discloses the ownership of these subsidiaries several times in the notes, and the financial statements are all Consolidated statements indicating that Shoppers owns subsidiaries. There is no other indication on the financial statements of the owned subsidiaries since there is no other interest in the subsidiaries and they are fully consolidated with the Shoppers Drug Mart company.

- (c) There were business acquisitions during the period as Note 8 provides details of these transactions. The business acquisitions in fiscal 2011 are also mentioned in several notes where assets and goodwill are discussed (note 16, 17). Finally, there is indication that businesses were acquired in the year on the Statement of Cash Flows which shows the cash outflow used to purchase the businesses.

RA 9-2 Royal Bank of Canada

(a)

(\$ millions)	2011	2010
Securities	179,558	183,519
Total Assets	751,702	726,206
Percentage of total assets	23.89%	25.27%
Loans	298,242	275,044

Since banks are primarily in the business of lending money, a significant portion of their assets are loans receivable from businesses and individuals. The investments are shown on the balance sheet under cash resources and before loans. The balance sheet is not classified between current and non-current assets and liabilities. The banking industry operates in a unique environment where investments in securities do not reflect the same motivations, goals, or risks as they do for other companies. The classification of investments as temporary investments, because the investments reflect excess cash invested for the short term, is not relevant to the banking industry. The investments reflect a management strategy for cash as their main asset. Accordingly, the policies reflect GAAP specific to the banking industry. Under this industry specific GAAP, financial institutions are not required to present a classified balance sheet since the classification does not present useful information to readers. These statements are for the year beginning November 1, 2010 and are therefore not required to be prepared in accordance with IFRS. The bank prepared IFRS financial statements for the year beginning November 1, 2011.

RA 9-2 (Continued)

(b)

(\$ millions)		2011	2010
Interest income from securities	A	5,118	4,719
Total interest income		18,920	17,746
Percentage of total interest income		27.1%	26.6%
Other income statement items relating to securities:			
Trading revenue (loss)	C	800	1,333
Commissions on securities transactions	B	1,329	1,271
Net gains (losses) on investment securities	D	128	38
Net securities income (A + B + C + D)	E	7,375	7,361
Net income		4,852	5,223
Percentage of net income		152.0%	140.9%
Investment in securities	F	179,558	183,519
Return on investment in securities (E/F)		4.11%	4.01%

The return on investment securities increased slightly from 2010 to 2011. There was also an increase in net gain on investment securities in 2011 versus 2010. A large proportion (80.9% in 2011 and 79.0% in 2010) of the securities consist of securities held for trading which are purchased for resale within a short period of time and which are valued at market. Although the proportion of trading securities to total securities remained relatively constant between the two years, the non-interest income from trading securities (shown as trading revenue) decreased from 2010 to 2011. The declining results are in part due to a \$64 million decreased in the fair value of net financial assets.

RA 9-2 (Continued)

- (c) Securities consist of “Securities - Trading”, and “Securities – Available-for-sale”. Their valuation methods are as follows:

Securities - Trading: comprise debt and equity securities purchased and recorded at fair market value. Unrealized gains and losses are directly recorded to net earnings through non-interest income as the fair values change at each reporting period. **Securities – Available for sale:** also represent debt and equity investments that are recorded at fair value at each reporting period. However, any unrealized gains and losses are reported to “Other Comprehensive Income”. Once the investment is sold, realized gains and losses will be reported in net earnings through non-interest income. The unrealized amounts originally included in other comprehensive income related to these sold investments will be transferred to net earnings to be included in the realized gains and losses.

Dividend income and interest income related to all types of securities would be reported directly in net earnings.

RA 9-3 Variable Interest Entities

A business enterprise for which the majority of rights and obligations that convey economic gains and losses are held by another reporting entity, even though the reporting entity does not have clear control over the enterprise through voting interests, is considered to be a variable interest entity (VIE) of the reporting entity that holds such rights.

The accounting issue that needs resolution is how VIE's should be accounted for by the reporting entity. The usual condition of consolidation by the reporting entity does not apply to VIE's because the reporting entity does not have clear control through voting interests over the VIE. However, if the reporting entity is the primary beneficiary/risk holder of the VIE because it holds the majority of rights and obligations of the VIE (such as financial instruments, service contracts, and non-voting ownership interests), it may be appropriate to require consolidation of such entities. It is recognized that in today's complex business environment, determination of control is based on factors other than common share ownership and thus a control test of 50% ownership in voting shares is not applicable.

The IASB has been working on defining "control" and has developed the current definition: "A reporting entity controls another entity when the reporting entity has the power to direct the activities of that other entity to generate returns for the reporting entity."

The term "power to direct" means that the entity has the ability to determine the VIE's strategic and financing policies in order to affect the returns of the VIE. In other words, the entity would identify what activities generate returns for the VIE and assess whether or not it has the power to direct these activities. (For example, directing administrative activities would not impact returns.)

The second part of the definition requires that an entity also benefit from the returns generated by the VIE. In other words, the entity is exposed to the variability of the return that the VIE can generate.

RA 9-3 (Continued)

An example of a company that is affected by accounting for VIE's is Empire Company Limited. The company has 271 franchise affiliate stores where the terms of the franchise agreements result in profits or losses of these VIE's accruing to Empire. Consequently, the company has consolidated these entities. The second example for Empire relates to a warehouse and distribution agreement that the company has with an independent entity. Again, the terms of the agreement result in profits and losses accruing to Empire and therefore this VIE has also been consolidated.

RA 9-4 POTASH CORPORATION OF SASKATCHEWAN

(a)	In millions of C\$	2011	2010
(1)	Cash used in investing activities	\$(2,251)	\$(2,572)
(2)	Cash used for investments in unconsolidated affiliates	\$(3)	\$(422)
(3)	Total investments in unconsolidated affiliates	\$3,452	\$4,893

(b) Cash used for investments represents less than 1% (16% in 2010) of total cash used for all investing activities. Meanwhile, the amount of investments reported on the balance sheet decreased from 2010 to 2011. The reason for this is that the assets held in the available-for-sale category declined 41% due to a loss of market value (see note 6), while the equity-accounted investees experienced a smaller 13% increase in market value. The long term investments are also significant to Potash as they represent 25% (36% in 2010) of the company's long term assets.

(c) As per note 6, Potash has three investments in associates that it accounts for using the equity method as follows:

- i. Sociedad Quimica y Minera de Chile S.A (SQM) of which the company owns 32% and the quoted market value is \$4,429 million.
- ii. Arab Potash Company (APC) of which Potash owns 28% and the quoted market value is \$1,383 million.
- iii. An "Other" category where no information is provided.

Potash has significant influence over these investments but not control which is why they are classified as associates. Potash's share of these investees' earnings was \$261 million (\$174 in 2010) and has been included in other income. Dividends received from these investees totaled \$128 million (\$79 in 2010) which would be reported as a reduction in the investment.

RA 9-4 (Continued)

(d) As per note 6, the company also has two investments that are recorded as available-for-sale, meaning these are reported at fair value at each reporting period. These investments are as follows:

- i. Sinofert, of which Potash owns 22% and is valued at \$439 million;
- ii. Israel Chemicals Limited, of which Potash owns 14% and is valued at \$1,826 million.

The unrealized gains and losses and losses that result from measuring these investments at fair value are recorded in accumulated other comprehensive income, net of taxes.

(e) In note 6, Potash explains that the fair value of the Sinofert available-for-sale investment was \$439 million at year end compared to the cost of \$579 million. Potash considered the extent of the difference between the fair value and cost (\$140 million below cost) and the amount of time below cost in their impairment assessment. Market conditions were also considered and Potash concluded that there was not objective evidence of impairment, and instead of recognizing an impairment loss Potash recorded the \$140 as an unrealized holding loss through Other Comprehensive Income.

Cumulative Coverage: Chapters 6 to 9

Solution to Posh Hotels Limited

(a)

(1) Cash and cash equivalents:

Euros (€) on hand	€12,000 x \$1.35	\$ 16,200
Bank balance	\$158,293 + \$15,487 - \$52,375	<u>121,405</u>
	Cash balance	137,605
T-Bills	\$98,039 + (8% X \$98,039 X 1/12)*	<u>98,693</u>
Cash and cash equivalents		\$236,298

*Also accept $\$98,039 + (8\% \times \$98,039 \times 30/365) = \$98,684$

(2) Accounts receivable:

Short Term	Accrued (given)	\$ 10,500
Suites	Amount expected to be collected - corporate	<u>10,000</u>
Total		\$ 20,500

(3) Allowance for doubtful accounts

Opening balance	Given	\$15,000 cr.
Accounts written off during year		<u>32,000</u> dr.
Balance before adjustment		17,000 dr.
Desired ending balance	5% X \$10,500	<u>525</u> cr.
Adjustment needed		\$17,525 cr.

(4) Inventory

Food:		
Chicken dinners	(40-20) x (\$5 + \$0.10)	\$ 102.00
Beef dinners	(35-10) x (\$6 + \$0.10)	152.50
Vegetable servings	75 x (\$1 + \$0.10)	82.50
Fruit servings	75 x (\$1 + \$0.10)	82.50
Desserts	100 x (\$3 + \$0.10)	<u>310.00</u>
Sub-total (all have cost < NRV)		<u>729.50</u>
Bathrobes and towels:		
Bathrobes 40 X \$49.50 cost		1,980.00
Towels, extra-large 25 X (\$18.00 – 3.60) NRV		360.00
Towels, large 20 X \$15 cost		<u>300.00</u>
Sub-total		<u>2,640.00</u>
Total		<u>\$3,369.50</u>

CUMULATIVE COVERAGE: CHAPTERS 6 TO 9 (Continued)

- (5) Investment in Dufort, at FV-NI
Fair value at December 31 \$ 47,000

- (6) Investment in Western Hotel Company

Original cost		\$5,000,000
Add: Share of income	\$250,000 x 30%	75,000
Less: Dividend received	\$100,000 x 30%	<u>(30,000)</u>
Ending balance		\$5,045,000

- (7) Unearned Revenue

Unearned revenue re one corporate suite	\$45,000 x 6/12	\$22,500

- (8) Investment income

Interest income on cash equivalents	8% X \$98,039 X 1/12*	\$ 654
Dividend from Dufort		500
Fair value adjustment of Dufort shares		<u>(1,000)</u>
Share of income in Western Hotel Company		<u>75,000</u>
Total		\$ 75,154

*Also accept \$645 = 8% X \$98,039 X 30/365

- (9) Bad Debt expense

Adjustment to obtain desired ending balance in Allowance for doubtful accounts		\$17,525
Uncollectible amount on suite	\$45,000 x 4/12 - \$10,000	<u>5,000</u>
Ending balance		\$22,525

- (b) Specific disclosures required:

Cash and cash equivalents: None required

Accounts receivable: None required

Allowance for doubtful accounts: Reconciliation of allowance account

Inventory: Statement that amount is the lower of FIFO cost or NRV applied on an item by item basis.

CUMULATIVE COVERAGE: CHAPTERS 6 TO 9 (Continued)

Investment in Dufort:

The carrying amount of the investment

The amount of gains and losses recognized by the FV-NI method

For each type of financial risk that results from the investment, disclose what the risk exposures are, how they arise, any changes over the accounting period, and information about any concentrations of risk.

Investment in Western Hotel Company:

Separate disclosure of the investment category on the balance sheet, or in the notes

Disclosure of the method of accounting used

Separate disclosure of income from investments that are accounted for using the equity method.

Information about the company year-end if different from the year-end for Posh Hotels Ltd.

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CHAPTER 10

PROPERTY, PLANT, AND EQUIPMENT: ACCOUNTING MODEL BASICS

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing Assignment
1. Understanding PP&E from a business perspective.	1		1	
2. Characteristics of PP&E assets.	1			
3. Recognition criteria for PP&E.	2	5, 7	2, 5	
4. Measurement of PP&E assets at acquisition.	3, 4, 19, 20, 21	2, 3, 4, 5, 6, 7, 8, 9, 10	2, 4	1,5
5. Determining asset cost under special situations.	5, 6, 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	1, 3, 4, 5, 6, 7, 8	1,2,3,4,5
6. Costs included in specific types of PP&E.	3, 4, 16	6, 7, 8, 9, 10	3, 6	1,2,
7. The cost model.		23, 24	9, 11, 12	6
8. The revaluation model.	17	25, 26	10	6
9. The fair value model.	18	23, 24	11	
10. Costs subsequent to acquisition.	19, 20	27, 28, 29	12	

ASSIGNMENT CLASSIFICATION TABLE (Continued)

11. Differences between ASPE and IFRS; expected future standards.		4	5	6
12. Capitalized borrowing costs for qualifying assets.*	21, 22, 23	5, 30, 31, 32	13, 14	2
13. Revaluation model using proportionate method.*		25, 26	10	

* This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E10-1	Cost elements and asset componentization.	Simple	10-15
E10-2	Purchase and self-constructed cost of assets with government grants.	Moderate	20-25
E10-3	Entries for asset acquisition, including self-construction.	Simple	15-20
E10-4	Treatment of various costs.	Moderate	30-40
E10-5	Asset acquisition	Moderate	25-35
E10-6	Acquisition costs of equipment.	Moderate	10-15
E10-7	Acquisition costs of realty and directly attributable costs.	Moderate	10-15
E10-8	Acquisition costs of realty.	Moderate	15-20
E10-9	Acquisition costs of realty.	Simple	10-15
E10-10	Natural Resource - Oil	Simple	10-15
E10-11	Acquisition cost of truck.	Simple	10-15
E10-12	Correction of improper cost entries.	Moderate	15-25
E10-13	Entries for equipment acquisitions.	Simple	15-20
E10-14	Entries for acquisition of assets.	Simple	20-25
E10-15	Purchase of equipment with noninterest-bearing debt.	Moderate	15-20
E10-16	Purchase of equipment with noninterest-bearing debt	Moderate	15-20
E10-17	Monetary exchange with boot.	Moderate	15-20
E10-18	Non-monetary exchange with boot.	Moderate	20-25
E10-19	Non-monetary exchange with boot.	Moderate	15-20
E10-20	Non-monetary exchanges	Simple	10-15
E10-21	Government assistance.	Simple	10-15
E10-22	Biological assets.	Moderate	15-20
E10-23	Measurement after acquisition – the fair value model versus the cost model.	Moderate	15-20
E10-24	Measurement after acquisition – the fair value model.	Moderate	15-20
*E10-25	Measurement after acquisition – the revaluation model.	Moderate	15-20
*E10-26	Measurement after acquisition – the revaluation model.	Simple	15-20
E10-27	Analysis of subsequent expenditures	Moderate	20-25
E10-28	Analysis of subsequent expenditures.	Simple	15-20
E10-29	Analysis of subsequent expenditures.	Simple	10-15
*E10-30	Capitalization of borrowing costs.	Moderate	20-25

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
*E10-31	Capitalization of borrowing costs.	Moderate	20-25
*E10-32	Capitalization of borrowing costs.	Moderate	20-25
P10-1	Purchases by deferred payment, lump-sum, and non-monetary exchange.	Moderate	35-45
P10-2	Classification of acquisition and other asset costs.	Moderate	35-40
P10-3	Classification of acquisition costs.	Moderate	40-55
P10-4	Classification of land and building costs.	Moderate	35-45
P10-5	Classification of costs and interest capitalization.	Moderate	30-35
P10-6	Acquisition costs and costs subsequent to acquisition	Moderate	30-40
P10-7	Monetary and non-monetary exchanges with boot.	Moderate	35-45
P10-8	Non-monetary exchanges with boot.	Moderate	30-40
P10-9	Measurement after acquisition – the revaluation model.	Moderate	30-40
*P10-10	Revaluation model – asset adjustment and proportionate methods.	Complex	35-45
P10-11	Fair value model and cost model.	Moderate	20-25
P10-12	Analysis of subsequent expenditures.	Moderate	20-25
*P10-13	Acquisition cost, capitalization of interest.	Moderate	25-35
*P10-14	Capitalization of interest, disclosures.	Moderate	20-30

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 10-1

(a)

Expanding aircraft capacity by 150% will result in more frequent service on existing routes, better customer service, and higher sales revenue. With extra aircraft in its fleet, Caruso will also be able to respond to changes in customer demand more quickly. On the other hand, expanding aircraft capacity by as much as 150% to service existing routes may signal over-investment in aircraft and related PP&E. Caruso's profitability will decline if the increase in sales revenue does not cover the increase in expenses as a result of the expansion. Some internally generated funds will be used and a new bank loan will be taken on to finance the expansion; Caruso will have considerably less financial flexibility. Less free cash flow and bank covenants will affect future operating, investment, debt retirement, and dividend payment decisions.

(b)

The proposed expansion will affect the balance sheet, income statement and statement of cash flows as follows:

- 1. Increase in total assets (due to addition of new aircraft and proportionately smaller decrease in cash)**
- 2. Increase in total liabilities (due to new bank loan)**
- 3. Increase in sales revenue**
- 4. Increase in interest expense**
- 5. Increase in depreciation expense**
- 6. Increase in operating expense**
- 7. Increase in financing inflows of cash**
- 8. Increase in investing outflows of cash**
- 9. Operating inflows and outflows of cash will change**

BRIEF EXERCISE 10-1 (Continued)

(c)

Rate of return on assets = net income / average total assets

Rate of return on assets will likely decrease, due to significant increase in interest expense and depreciation expense affecting net income, and significant increase in average total assets.

Asset turnover = net sales / average total assets

Asset turnover will likely decrease, due to significant increase in average total assets.

BRIEF EXERCISE 10-2

(a)

Accounting standards require that the following two recognition criteria be satisfied when recognizing an item of PP&E: (1) it is probable that the item's associated future economic benefits will flow to the entity, and (2) its cost can be measured reliably. Playtime's new piece of equipment will be used to produce a new toy which is expected to be very popular and generate sales and cash flows, therefore criteria (1) is satisfied. The cost of the equipment will be reliably measurable (based on purchase price), therefore criteria (2) is satisfied. The new piece of equipment satisfies both recognition criteria, and should be recognized and capitalized as an item of PP&E.

(b)

Under IFRS, the parts of PP&E with relatively significant costs are capitalized and depreciated separately. Considering that each significant part is separable and may be replaced, the injection unit, clamping unit, and electrical equipment should each be capitalized as asset components and depreciated separately. Assuming that the cost of each part in the group of other parts is not relatively significant, the group of other parts should be capitalized and depreciated as one component.

(c)

Under ASPE, the costs of significant separable components are allocated to those parts when practical, but in practice, this has not been done to the same extent as required under IFRS. For example, under ASPE, Playtime may record the purchase of the equipment without asset componentization, in which case, the total cost of the equipment would be recorded in the Equipment account as one asset, and depreciation would be calculated based on the useful life of the entire piece of equipment.

BRIEF EXERCISE 10-3

(a) Land cost = \$570,000 + \$6,000 + \$48,000 = \$624,000

Under IFRS, the temporary use of the land as a parking lot and its net cost or revenue are not necessary to develop the land or the new building, therefore the net cost or revenue cannot be included in the cost of the land or the new building. The net revenue of \$4,000 is recognized in income when earned.

(b) Land cost = \$570,000 + \$6,000 + \$48,000 = \$624,000

Under ASPE, any net revenue or expenses generated prior to substantial completion and readiness for use are included in the asset's cost. The net revenue of \$4,000 would be included in the cost of the new building, and credited to the building account.

BRIEF EXERCISE 10-4

IFRS

Direct labour	\$73,000
Material purchased for building	82,500
Interest on loan to finance construction	2,300
Allocation of plant overhead based on labour hours worked on building	29,000
Architectural drawings for building	<u>7,500</u>
Total cost of new building	<u>\$194,300</u>

Under IFRS, capitalization of construction costs stops when the item is in the location and condition necessary for it to be used as management intended, even if it has not begun to be used.

ASPE

Direct labour	\$79,000
Material purchased for building	82,500
Allocation of plant overhead based on labour hours worked on building	29,000
Architectural drawings for building	<u>7,500</u>
Total cost of new building	<u>\$198,000</u>

Under ASPE, capitalization of construction costs stops when the asset is substantially complete and ready for productive use, as predetermined by management. It is likely that the amount of fixed overhead costs allocated based on direct labour hours would also be increased.

Note: For PP&E assets, only directly attributable costs are capitalized. The president's salary is a fixed cost, thus the allocation is not directly traceable and not eligible for capitalization.

BRIEF EXERCISE 10-5

(a) Purchase:

Equipment.....	40,000	
Accounts Payable		40,000

Payment:

Accounts Payable	40,000	
Equipment		800
Cash		39,200

(b) Purchase:

Equipment.....	40,000	
Accounts Payable		40,000

Payment:

Accounts Payable	40,000	
Cash		40,000
Finance Expense	800	
Equipment		800

BRIEF EXERCISE 10-6

Trucks (\$80,000 X .63552)	50,842	
Notes Payable.....		50,842

BRIEF EXERCISE 10-7

Trucks	80,000	
Notes Payable.....		80,000

BRIEF EXERCISE 10-8

	<u>Fair Value</u>	<u>% of Total</u>	<u>Cost</u>	<u>Recorded Amount</u>
Land	\$ 95,000	95/455	\$306,000	\$ 63,890
Building	250,000	250/455	\$306,000	168,132
Equipment	<u>110,000</u>	<u>110/455</u>	<u>\$306,000</u>	<u>73,978</u>
	<u>\$455,000</u>			<u>\$306,000</u>

BRIEF EXERCISE 10-9

(a)

Land	85,000	
Common Shares.....		85,000

Under IFRS, the fair value of the asset acquired should be used to measure its acquisition cost, unless that fair value cannot be estimated reliably.

(b)

Land	85,000	
Common Shares.....		85,000

Under ASPE, the more reliable of the fair value of the asset received or the equity instruments given up should be used to measure the acquisition cost of the asset. In this example, the common shares are so thinly traded that the estimated fair value of the land is more reliable, and the land would be recorded at \$85,000.

BRIEF EXERCISE 10-10

Truck (new)	2,600	
Accumulated Depreciation - Trucks	20,700	
Truck (old)		23,000
Cash		300*

*The transaction is non-monetary because the amount of cash is not significant. Since the transaction lacks commercial substance, no gain is recognized.

BRIEF EXERCISE 10-11

Office Equipment.....	7,000*	
Accumulated Depreciation – Machinery.....	2,000	
Loss on Disposal of Machinery.....	4,000	
Machinery		9,000
Cash		4,000

***\$3,000 + \$4,000**

BRIEF EXERCISE 10-12

Truck (new)	33,000*	
Loss on Disposal of Trucks.....	1,000	
Accumulated Depreciation - Trucks	27,000	
Truck (used)		30,000
Cash		31,000

***\$2,000 + \$31,000**

It is assumed that the amount of cash paid is significant and that the transaction is monetary.

BRIEF EXERCISE 10-13

Buildings.....	470,000	
Cash.....		470,000
Rent Expense (or Prepaid Rent).....	14,000	
Cash.....		14,000
Cash.....	140,000	
Buildings.....		140,000

BRIEF EXERCISE 10-14

Buildings.....	470,000	
Cash.....		470,000
Rent Expense.....	14,000	
Cash.....		14,000
Cash.....	140,000	
Deferred Revenue - Government Grants		140,000

BRIEF EXERCISE 10-15

(a)		
Equipment.....	55,000	
Contributed Surplus – Donated Capital....		55,000
(b)		
Equipment.....	55,000	
Deferred Revenue - Government Grants ..		55,000

BRIEF EXERCISE 10-16

(a)

Mineral Resources	487,700*	
Cash		487,700

Mineral Resources	12,300	
Accumulated Depreciation – Equipment		12,300

Mineral Resources	95,000**	
Asset Retirement Obligation		95,000

*\$400,000 + \$100,000 - \$12,300 = \$487,700

**\$75,000 + \$20,000

(b)

Mineral Resources	487,700*	
Cash		487,700

Mineral Resources	12,300	
Accumulated Depreciation – Equipment		12,300

Mineral Resources	75,000	
Asset Retirement Obligation		75,000

*\$400,000 + \$100,000 - \$12,300 = \$487,700

BRIEF EXERCISE 10-17

(a)

Accumulated Depreciation - Buildings 55,000
Buildings..... 55,000
The Buildings account is now \$100,000 - \$55,000 = \$45,000.

Buildings (\$65,000 – \$45,000) 20,000
Revaluation Surplus (OCI) 20,000

(b)

	Before revaluation		Proportional after revaluation
Building	\$100,000	x 65/45	\$144,444
Accumulated depreciation	55,000	x 65/45	79,444
Carrying amount	<u>\$ 45,000</u>	x 65/45	<u>\$ 65,000</u>
Buildings.....			44,444
Accumulated Depreciation - Buildings			24,444
Revaluation Surplus (OCI).....			20,000

BRIEF EXERCISE 10-18

	IFRS	ASPE
(a) Land held for undetermined future use	May be an investment, but also qualifies as investment properties under IAS 40 (fair value model or cost model)	Likely considered an investment (cost model)
(b) Vacant building leased out under operating lease	May be an investment, but also qualifies as investment properties under IAS 40 (fair value model or cost model)	Likely considered an investment (cost model)
(c) Property held by subsidiary (real estate firm) in ordinary course of business	Treated as inventory under IAS 2	Treated as inventory
(d) Property held for use in the manufacturing of products	Treated as PP&E long-lived asset under IAS 16 (cost model or revaluation model)	Treated as PP&E asset (cost model)

BRIEF EXERCISE 10-19

- (a) Revenue expenditure**
- (b) Revenue expenditure**
- (c) Capital expenditure**
- (d) Capital expenditure**
- (e) Capital expenditure**
- (f) Revenue expenditure**

BRIEF EXERCISE 10-20

(a)

The cost of the new power train is measurable and it will produce future economic benefits to Shipper. Thus, the new power train should be recognized as an asset.

(b)

Under IFRS, for replacement parts that meet the recognition criteria for PP&E, the replaced part's carrying amount is removed from the asset account whether it was originally recognized as a separate component or not, and the cost of the replacement part is capitalized as a separate component. The original invoice for the transport truck did not specify the cost of the power train (i.e., it appears it was not componentized on the original purchase); however, the cost of the replacement—\$40,000—can be used as an indication (usually by discounting) of the likely cost of the item seven years ago. If an appropriate discount rate is taken, say 5% per annum for this example, \$40,000 discounted back seven years amounts to \$28,427 ($\$40,000 / (1.05)^7$), which should be removed from the asset account along with the related accumulated depreciation on the old power train to date, and the difference recorded as a loss. The cost of the new power train, \$40,000, would be capitalized and depreciated as a separate component in its own asset account.

(c)

Under ASPE, for major replacements, if the cost of the previous part is known, its carrying amount is removed from the asset account. If not, the asset account, its accumulated depreciation, or an expense could be charged with the cost. The original invoice for the transport truck did not specify the cost of the power train; it is assumed that the cost of the previous power train is not known. Therefore, the asset account, its accumulated depreciation, or an expense could be debited with the cost of the new power train.

***BRIEF EXERCISE 10-21**

Expenditures		Capitalization Period	Weighted-Average Accumulated Expenditures
Date	Amount		
3/1	\$1,500,000	10/12	\$1,250,000
6/1	1,200,000	7/12	<u>700,000</u>
			<u>\$1,950,000</u>

***BRIEF EXERCISE 10-22**

Total weighted-average accumulated expenditures	\$1,950,000
Less: financed by specific construction loan	<u>1,000,000</u>
Weighted-average accumulated expenditures financed by general borrowings	<u>\$ 950,000</u>

Capitalization rate calculation on general borrowings:

	Principal	Borrowing Cost
13%, 5-year note	\$2,000,000	\$260,000
15%, 4-year note	<u>3,500,000</u>	<u>525,000</u>
	<u>\$5,500,000</u>	<u>\$785,000</u>

$$\text{Capitalization rate} = \frac{\$785,000}{\$5,500,000} = \underline{\underline{14.27\%}}$$

***BRIEF EXERCISE 10-23**

Avoidable costs on asset-specific debt

$(\$1,000,000 \times 12\% \times 10/12)$ **\$100,000**

Avoidable costs on general debt

$(\$950,000 \times 14.27\%)$ **135,565**

Total avoidable borrowing costs **\$235,565**

**The avoidable borrowing costs would be capitalized as part of
the cost of the building under IFRS.**

**Under ASPE, interest costs directly attributable to the
construction of the building would be capitalized if that is the
accounting policy used by the entity. However, the company
could also choose an accounting policy whereby such costs
are expensed under ASPE.**

SOLUTIONS TO EXERCISES

EXERCISE 10-1 (10-15 minutes)

		(a) specific costs	(b) componentization (separate recognition)?
1.	Head office boardroom table and executive chairs	- purchase price - delivery charges - assembly costs (if applicable)	- boardroom table, executive chairs - table probably has a much longer useful life than the chairs
2.	A landfill site	- purchase price, transfer taxes, surveying and legal fees - costs of any work required to prepare land and make it suitable to accept refuse. - decommissioning or restoration costs associated with the closure of the facility	- different parts of the landfill site (used portions vs. unused portions) - any buildings on the site
3.	Wooden pallets in a warehouse	- purchase price - transportation charges	- likely all pallets have similar useful lives and rate of depreciation
4.	Forklift vehicles in a manufacturing plant	- purchase price, including delivery costs	- depending on how they are powered, the motor element might be recognized separately
5.	Stand-alone training facility for pilot training, including a flight simulator, classrooms equipped with desks, whiteboards, and electronic instructional aids	- purchase price of facility, equipment, and furniture and fixtures - installation / assembly costs - delivery charges - professional fees for design	- building, flight simulator, desks, whiteboards, electronic instructional aids, land - all have different useful lives and rates of depreciation
6.	Large passenger aircraft used in commercial flights	- purchase price - extras / changes to interior design of aircraft - costs to imprint company logo on plane - registrations	- exterior shell of aircraft, interior seating, carpeting, and storage compartments, engines, electrical systems - all have different useful lives and rates of depreciation

EXERCISE 10-1 (Continued)

7.	Medical office building	- purchase price - land transfer taxes on purchase - surveying and legal fees - architectural fees - renovation and repair costs and cost of permits - excavation and construction costs	- land portion (when purchasing a building, land is generally also purchased as a lump sum purchase) - building shell (including construction and design costs) - building services systems (e.g., elevators, HVAC, plumbing system and heating and air-conditioning system, computer network wiring) - fixed equipment / fixtures (e.g., roof, sterilizers, casework, fume hoods, etc) - all have different useful lives and rates of depreciation
8.	Computer equipment	- purchase price - lease payout at end of term if applicable - installation / setup costs	- possibly separate the computer processing unit (desktop tower, laptop) from the peripherals (keyboards, mouse, monitor, printer, scanner) - all have different useful lives and rates of depreciation (since generally on a refresh of the equipment, only the processing unit is replaced and the peripherals remain)

EXERCISE 10-2 (20-25 minutes)

Purchase:

Cash paid for equipment, including sales tax of \$7,000	\$107,000
Freight and insurance while in transit	2,000
Cost of moving equipment into place at factory	3,100
Wage cost for technicians to test equipment	4,000
Material cost for testing	500
Special plumbing fixtures required for new equipment	8,000
Provincial government grant	<u>(25,000)</u>
Total cost	<u>\$99,600</u>

The GST of \$5,000 paid on purchase of the equipment should be reported as GST Receivable. The insurance premium paid during the first year of operation of this equipment should be reported as insurance expense. Repair costs incurred in the first year of operation of this equipment should be reported as maintenance and repairs expense. The insurance and repair costs relate to periods subsequent to purchase. The government grant could alternatively be credited to a deferred credit account rather than to the equipment account.

Construction:

Material and purchased parts (\$200,000 X .98)	\$196,000
Labour costs	190,000
Overhead costs (only variable portion capitalized)	30,000
Cost of installing equipment	<u>4,400</u>
Total cost	<u>\$420,400</u>

EXERCISE 10-1 (Continued)

Note that the cost of material and purchased parts is reduced by the amount of cash discount not taken because the equipment should be reported at its cash equivalent price. The imputed interest on funds used during construction is related to share financing and should not be capitalized or expensed. This item is an opportunity cost that is not reported.

The standards for manufactured inventories require that a portion of all production overhead costs be applied to an inventory asset, however the standard for PP&E assets is different. For PP&E assets, only the directly attributable costs are capitalized. Since fixed overhead is generally not directly attributable, but rather allocated on some rational basis, the fixed overhead is generally expensed rather than capitalized. (Note: Care must be taken to determine whether the assets are made for resale or for the entity's own use, as the treatment of the fixed overhead is different under each of these circumstances.)

EXERCISE 10-2 (Continued)

Profit on self-construction should not be reported. Profit should only be reported when the asset is sold.

EXERCISE 10-3 (15-20 minutes)

1.	Land	92,000	
	Revenue -- Government Grants ..		92,000
2.	Land	407,000	
	Buildings – Structure.....	887,000	
	Buildings – HVAC	220,000	
	Buildings – Interior Coverings	116,000	
	Common Shares*		1,630,000

Under IFRS, the fair value of the asset(s) acquired should be used to measure acquisition cost, and it is presumed that this value can be determined except in rare cases.

3.	Machinery	89,305	
	Inventory (\$23,000 + \$625 + \$8,700)		32,325
	Salaries and Wages Expense.....		56,000
	Supplies.....		980

Note: For PP&E assets, only the directly attributable costs are capitalized. Since fixed overhead is generally not directly attributable, but rather allocated on some rational basis, the fixed overhead applied of \$39,200 (70% x \$56,000) is generally expensed rather than capitalized.

EXERCISE 10-4 (30-40 minutes)

(a)

	Land	Buildings	Machinery	Other
Legal fees for title				
Search	\$ 520			
Architect's fees		\$ 2,800		
Cash paid for land and old building	112,000			
Removal of old building (\$20,000 – \$5,500)	14,500			
Surveying before Construction		370		
Interest on short-term loans during construction		7,400		
Excavation before Construction		19,000		
Machinery purchased			\$63,700	\$1,300 Finance Expense
Freight on machinery			1,340	
Storage charges caused by noncompletion of building				2,180 Misc. Expense
New building		485,000		
Assessment by city	1,600			
Hauling charges—Machinery				620 Misc. Expense
Installation—machinery			2,000	
Landscaping	5,400			
Municipal grant		(8,000)		
	<u>\$134,020</u>	<u>\$506,570</u>	<u>\$67,040</u>	<u>\$4,100</u>

EXERCISE 10-4 (Continued)

(b)

Under IFRS, borrowing costs are defined as “interest and other costs that an entity incurs in connection with the borrowing of funds”, and borrowing costs incurred on qualifying assets must be capitalized. ASPE is more restrictive and includes only interest costs in the definition of borrowing costs. Under ASPE, interest costs may be capitalized or expensed, depending on the accounting policy used by the entity.

(c)

Capitalization of borrowing costs related to a qualifying asset results in higher net income and total assets in the period(s) of construction (since capitalization of borrowing costs results in lower interest expense and finance expense in those period(s), and depreciation expense would not begin until the asset is available for use). In the periods after construction is complete, and the asset is in the location and condition necessary for use as management intended, net income would be lower than if borrowing costs were initially expensed. This is because the capitalized interest (included in the asset account) would be depreciated along with the construction cost of the related asset in those periods. A potential investor who may analyze the company's profitability, and compare the company's net income to the net income reported by competitor companies should consider the effect of capitalization of borrowing costs on the subject company's financial statements.

***EXERCISE 10-5 (25–35 minutes)**

**Hayes Industries Corp.
Acquisition of Assets 1 and 2**

Use Appraised Values to break-out the lump-sum purchase

Description	Appraisal	%	Lump-Sum	Cost
Machinery	90,000	90/120	100,000	75,000
Office Equipment	<u>30,000</u>	30/120	100,000	25,000
	<u>120,000</u>			

Machinery	75,000	
Office Equipment	25,000	
Cash.....		100,000

Acquisition of Asset 3

Use the cash price as a basis for recording the asset with a discount recorded on the note.

Machinery	35,000	
Cash.....		10,000
Notes Payable		25,000

(Alternatively, the Notes Payable could be recognized at \$30,000 along with a Discount on Notes Payable of \$5,000.)

The difference between the \$25,000 notes payable and the future payments of \$30,000 should be amortized to interest income over the two years.

***EXERCISE 10-5 (Continued)**

Acquisition of Asset 4

The exchange lacks commercial substance and is considered non-monetary. Because the exchange lacks commercial substance, the cost of the asset received is recorded at the carrying amount of the asset(s) given up, which is adjusted for the inclusion of any cash or other monetary assets.

Truck (new)*	50,000	
Accumulated Depreciation - Trucks	40,000	
Cash.....	10,000	
Truck (old)		100,000

*** \$100,000 – \$40,000 – \$10,000**

Acquisition of Asset 5

Under IFRS, the fair value of the office equipment acquired should be used to measure its acquisition cost.

Office Equipment	900	
Common Shares		900

***EXERCISE 10-5 (Continued)**

Construction of Building

Schedule of Weighted-Average Accumulated Expenditures

<u>Date</u>	<u>Amount</u>	<u>Current Year Capitalization Period</u>	<u>Weighted-Av. Accumulated Expenditures</u>
February 1	\$ 150,000	9/12	\$112,500
February 1	120,000	9/12	90,000
June 1	360,000	5/12	150,000
September 1	480,000	2/12	80,000
November 1	<u>100,000</u>	0/12	<u>0</u>
	<u>\$1,210,000</u>		<u>\$432,500</u>

Total weighted-average accumulated expenditures	\$432,500
Less: financed by specific construction loan	<u>600,000</u>
Weighted-average accumulated expenditures financed by general borrowings (cannot be less than zero)	<u>\$0</u>

Capitalization rate calculation on general borrowings:

	<u>Principal</u>	<u>Borrowing Cost</u>
8%, other general debt	\$200,000	\$16,000
6%, loan payable	<u>350,000</u>	<u>21,000</u>
	<u>\$550,000</u>	<u>\$37,000</u>

$$\text{Capitalization rate} = \frac{\$37,000}{\$550,000} = \underline{\underline{6.73\%}}$$

***EXERCISE 10-5 (Continued)**

Avoidable costs on asset-specific debt	
(\$432,500* x 12%)	\$51,900
Avoidable costs on general debt	
(\$0 x 6.73%)	0
Total avoidable borrowing costs	<u>\$51,900</u>

The asset-specific debt was \$600,000, however, the avoidable interest cost is calculated by capping the debt at weighted-average accumulated expenditures (\$432,500 in this case). The weighted expenditures are less than the amount of specific borrowing; the specific borrowing rate is used.

Borrowing costs to be capitalized = Total avoidable borrowing costs – investment income (resulting from investment of idle funds) = \$51,900 – \$4,600 = \$47,300

Land	150,000	
Buildings (1,060,000 + 47,300).....	1,107,300	
Cash		1,210,000
Interest Expense		47,300

Note: Private entities that choose to apply ASPE have the choice of either capitalizing or expensing the interest costs related to the acquisition, construction, or development of qualifying assets.

EXERCISE 10-6 (10-15 minutes)

Capitalized cost of the equipment:

Invoice purchase price	\$100,000
Provincial sales tax, 7% (non-refundable)	7,000
Transportation cost	1,700
Net direct costs of adjusting the equipment so it will work as intended, and professional fees associated with the acquisition and installation (\$300 + \$200 – \$400 + \$11,000)	<u>11,100</u>
Total cost	<u>\$119,800</u>

The GST is excluded because it is recoverable. The \$500 storage cost is not included in the cost of the equipment since it was not a required cost to bring the equipment to the location and to make it operational. The additional \$3,000 labour and \$2,000 material costs before the machine operated at full capacity are inventory production costs incurred after the equipment was in a condition to operate as management intended and they, along with the sales of \$5,500, are excluded. Lastly, the borrowing costs of \$800 were not incurred to finance the acquisition, construction, or development of a qualifying asset—one that requires a substantial period of time to get ready for its intended use.

EXERCISE 10-7 (10-15 minutes)

According to IAS 16, these costs can be capitalized:

Cost of the manufacturing plant	2,500,000
Initial delivery and handling costs	200,000
Cost of site preparation	600,000
Consultants' fees	700,000
Estimated dismantling costs to be incurred after 7 years	<u>300,000</u>
	<u>\$4,300,000</u>

Interest charges paid on “deferred credit terms” to the supplier of the manufacturing plant (not a qualifying asset under IAS 23 capitalization of borrowing costs) of \$200,000 and operating losses before commercial production amounting to \$400,000 are not regarded as directly attributable costs and thus cannot be capitalized. They should be written off to the income statement in the period they are incurred.

EXERCISE 10-8 (15-20 minutes)

Item	Land	Land Improve- ments	Building	Other Accounts
1.				(\$275,000)
				Notes Payable
2.			\$275,000	
3.	\$8,000			
4.	7,000			
5.			6,000	
6.			(1,000)	
7.			22,000	
8.	250,000			
9.	9,000			
10.		\$ 4,000		
11.	11,000			
12.	(5,000)			
13.			13,000	
14.		19,000		
15.		14,000		
16.			3,000	
17.				150
				GST Receivable

EXERCISE 10-9 (10-15 minutes)

The allocation of costs would be as follows:

	<u>Land</u>	<u>Building</u>
Land	\$460,000	
Razing Costs	50,000	
Salvage	(6,300)	
Legal Fees	1,850	
Survey		\$2,200
Plans		82,000
Liability Insurance		900
Construction		3,640,000
Interest		<u>170,000</u>
	<u>\$505,550</u>	<u>\$3,895,100</u>

According to the architects and engineers assessment, the cost of the building should be componentized in the accounting records as follows (due to different useful lives and depreciation rates):

		<u>Building</u>
Building – Structure	55%	2,142,305
Building – HVAC	35%	1,363,285
Building – Roof	10%	<u>389,510</u>
	<u>100%</u>	<u>\$3,895,100</u>

EXERCISE 10-10 (10-15 minutes)

(a)

The purchase price of \$472,000, the legal obligation of \$46,000 related to future clean-up and reconditioning costs, and the constructive obligation of \$30,000 would be capitalized in the Mineral Resources asset account. The remainder of the costs described would be considered operational and expensed during the period.

(b)

Under ASPE, only the purchase price of \$472,000 and the legal obligation of \$46,000 related to future clean-up and reconditioning costs would be capitalized in the Mineral Resources asset account. The cost of the constructive obligation of \$30,000 would not be capitalized.

(c)

Under IFRS, both the legal obligation of \$46,000 and the constructive obligation of \$30,000 are recorded as a liability on the company's balance sheet. Therefore under IFRS, debt increases by \$76,000. Total assets increases by the same amount. Overall, as a result of the lease agreement, debt to total assets increases to 61%, signalling that the percentage of total assets provided by creditors has increased, which a creditor would view as unfavourable. The creditor may also analyze that the legal and constructive obligations are included in debt in the debt to total assets ratio, but that they will not result in cash outflows until the mine is abandoned, which may take place several years in the future.

EXERCISE 10-11 (10-15 minutes)

(a)

1.	Truck #1.....	15,900	
	Cash.....		15,900
2.	Truck #2.....	16,545*	
	Cash.....		2,000
	Notes Payable		14,545
	*PV of \$16,000 @ 10% for 1 year =		
	\$16,000 X .90909 = \$14,545		
	\$14,545 + \$2,000 = \$16,545		
3.	Truck #3.....	17,100	
	Sales Revenue.....		17,100
	 Cost of Goods Sold	13,500	
	Inventory		13,500
	Note: the two entries could have been combined into one compound entry.		

In this example, the non-monetary asset exchange has commercial substance and fair values are reliably measurable, therefore the exchange is recorded at the fair value of the asset(s) (the computer) given up. If the fair value of what is acquired is more reliably measurable, the exchange would be recorded at the fair value of Truck #3.

4.	Truck #4 (1,000 shares X \$15)	15,000	
	Common Shares		15,000

Under IFRS, the fair value of the asset acquired should be used to measure its acquisition cost, unless that fair value cannot be estimated reliably. In this case, the fair value of the shares appears to be a better gauge of the fair value of the truck received. Vehicles are very often sold at a price below the list price.

EXERCISE 10-11 (Continued)

(b)

Transaction 4 involves a share-based payment. Under ASPE, the more reliable of the fair value of the asset received or the equity instruments given up should be used to measure the acquisition cost of the asset. If Jackson prepares financial statements in accordance with ASPE, it would be a private company, and its shares would not be actively traded. The fair value of its common shares would likely not be more reliable than the fair value of the truck, therefore the fair value of the truck (as determined by a reliable, independent appraiser, for example) would be used to measure the acquisition cost.

EXERCISE 10-12 (15-25 minutes)

(a) 1.	Land	131,250	
	Buildings – Structure	260,313	
	Buildings – Roof.....	45,937	
	Equipment	262,500	
	Cash		700,000

$$\$700,000 \times \frac{\$150,000}{\$800,000} = \$131,250 \quad \text{Land}$$

$$\$700,000 \times \frac{\$350,000}{\$800,000} = \$306,250 \quad \text{Buildings}$$

Since there are different useful lives to major components on the buildings, then they should be recorded as follows:

		<u>Buildings</u>
Buildings – Structure	85%	260,313
Buildings – Roof	<u>15%</u>	<u>45,937</u>
	<u>100%</u>	<u>\$306,250</u>

$$\$700,000 \times \frac{\$300,000}{\$800,000} = \$262,500 \quad \text{Equipment}$$

2.	Equipment.....	25,000	
	Cash		2,000
	Notes Payable		23,000
3.	Office Equipment.....	19,600	
	Accounts Payable.....		19,600
	(\$20,000 X .98)		
4.	Land	27,000	
	Revenue -- Government		27,000
	Grants.....		
5.	Buildings	600,000	
	Cash		600,000

EXERCISE 10-12 (Continued)

(b)	1.	Buildings – Structure	260,313	
		Buildings – Roof	45,937	
		Land (\$150,000 – \$131,250)		18,750
		Buildings		250,000
		Equipment.....		37,500
		(\$300,000 – \$262,500)		
	2.	Interest Payable	2,300	
		Equipment.....		2,300
	3.	Purchase Discounts	400	
		Office Equipment.....		400
	4.	Land	27,000	
		Revenue -- Government		27,000
		Grants.....		
	5.	Profit on Construction.....	140,000	
		Buildings.....		140,000

EXERCISE 10-12 (Continued)

- (c)**
- 1. The cost principle has been violated.**
 - 2. The cost principle has been violated. The cost of the equipment should be the cash purchase price, excluding future financing charges. The interest on the note should be recognized as it accrues (the matching concept). This may not be in the same accounting period as the purchase of the equipment.**
 - 3. The cost principle has been violated. The discount lost should be included as a reduction of the cost of the equipment. The Purchase Discounts account only applies to purchased of merchandise inventory.**
 - 4. The initial incorrect treatment does not reflect the land as an asset on the balance sheet. Even though the cost of the land is nil, not showing the land on the balance sheet does not achieve representational faithfulness of the nature of the transaction as an increase in the assets and an increase in the equity of the owners.**
 - 5. The cost principle and the revenue recognition principle have been violated.**

EXERCISE 10-13 (15-20 minutes)

(a)

1.	Equipment (\$50,000 + \$3,500)	53,500	
	GST Receivable.....	2,500	
	Accounts Payable		56,000
	Accounts Payable	56,000	
	Finance Expense.....	560	
	Equipment (\$56,000 X .01).....		560
	Cash.....		56,000
2.	Equipment (new)	48,500*	
	Accumulated Depreciation -		
	Equipment.....	38,000	
	Gain on Disposal of Equipment..		6,000**
	Accounts Payable		40,500
	Equipment (old)		40,000
	**Cost	\$40,000	
	Accumulated Depreciation	<u>38,000</u>	
	Book value	2,000	
	Fair market value	<u>8,000</u>	
	Gain	<u>\$6,000</u>	
	*Cost (\$40,500 + \$8,000)	\$48,500	
	Accounts Payable	40,500	
	Cash.....		40,500

EXERCISE 10-13 (Continued)

3. Equipment (\$35,182 + \$10,000)	45,182	
Notes Payable		35,182
Cash.....		10,000

***PV of annuity of \$20,000 @ 9% for 2 years =
\$20,000 X 1.75911 = \$35,182.20**

First payment on the note:

Interest Expense	3,166*	
Notes Payable		3,166
Notes Payable	20,000	
Cash.....		20,000

*** \$35,182 X 9% = \$3,166**

Second payment on the note:

Interest Expense	1,652**	
Notes Payable		1,652
Notes Payable	20,000	
Cash.....		20,000

****(\$35,182 – \$16,834) X 9%
= \$18,348 X 9% = \$1,652 (rounded)**

- (b) Finance Expense would be shown on the income statement in Other Expenses and Losses. It would not be included in the Cost of Goods Sold section with purchase discounts since it does not relate to the purchase of inventory. Purchase discounts lost on inventory, accounted for using the net method, are also shown as a finance expense in Other Expenses and Losses.**

EXERCISE 10-14 (20-25 minutes)

(a)

1.	Land	550,000	
	Buildings – Structure	1,500,000	
	Buildings – HVAC	175,000	
	Machinery	725,000	
	Common Shares		2,950,000

Transaction 1 involves a share-based payment. Under IFRS, the fair value of the asset(s) acquired should be used to measure acquisition cost, unless that fair value cannot be estimated reliably.

2.	Buildings (\$98,000 + \$59,000)	157,000	
	Machinery	110,000	
	Land Improvements	131,000	
	Land	16,000	
	Cash		414,000
	Machinery	312,900*	
	Maintenance and Repairs Expense	12,500	
	Cash		325,400
	*((\$305,000 X 98%) + \$14,000		

(b)

Under ASPE, the more reliable of the fair value of each asset received or the equity instruments given up should be used to measure the acquisition cost. If Craig prepares financial statements in accordance with ASPE, it would be a private company, and its shares would not be actively traded. The fair value of its common shares would likely not be more reliable than the fair value of each asset, therefore the fair value of each asset would be used to measure the acquisition cost.

EXERCISE 10-14 (Continued)

(c)	Machinery	312,900	
	Maintenance and Repairs Expense	12,500	
	Finance Expense.....	6,100	
	Cash.....		331,500

EXERCISE 10-15 (15-20 minutes)

(a) Equipment 682,342*
 Notes Payable 682,342
 *PV of \$180,000 annuity @ 10% for 5
 years: $(\$180,000 \times 3.79079) = \$682,342$

(b) Interest Expense 68,234*
 Notes Payable $(\$180,000 - \$68,234)$ 111,766
 Cash..... 180,000
 *(10% X \$682,342)

Year	Note Payment	10% Interest	Reduction of Principal	Balance
1/2/14				\$682,342
12/31/14	\$180,000	\$68,234	\$111,766	570,576
12/31/15	180,000	57,058	122,942	447,634

(c) Interest Expense 57,058
 Notes Payable $(\$180,000 - \$57,068)$ 122,942
 Cash..... 180,000

(d) Depreciation Expense..... 85,293*
 Accumulated Depreciation -
 Equipment..... 85,293
 * $(\$682,342 \div 8)$

EXERCISE 10-16 (15-20 minutes)

- (a) 1. \$30,000.
2. $\$26,790 = \$30,000 \times PV(8\%,2) + \$600 \times PVA(8\%,2)$
3. $\$25,720 = \$30,000 \times PV(8\%,2)$

(b) <u>8% interest-bearing note.</u>			
09/01/14	Equipment	30,000	
	Notes Payable		30,000
12/31/14	Interest Expense	800	
	Interest Payable		800
	(\$30,000 X 8% X 4/12)		
09/01/15	Interest Payable	800	
	Interest Expense	1,600	
	Cash.....		2,400
12/31/15	Interest Expense	800	
	Interest Payable		800
09/01/16	Interest Payable	800	
	Interest Expense	1,600	
	Notes Payable	30,000	
	Cash.....		32,400
<u>2% interest-bearing note.</u>			
09/01/14	Equipment [part (a)]	26,790	
	Notes Payable		26,790
12/31/14	Interest Expense	714*	
	Notes Payable		514
	Interest Payable		200**
	*(\$26,790 X 8% X 4/12)		
	** (\$30,000 X 2% X 4/12)		

EXERCISE 10-16 (Continued)

09/01/15	Interest Payable	200	
	Interest Expense	1,429**	
	Notes Payable		1,029
	Cash (\$30,000 X 2%)		600
	**(\$26,790 X 8% X 8/12)		

12/31/15	Interest Expense	756	
	Notes Payable		556
	Interest Payable		200
	(\$28,333 X 8% X 4/12) or \$2,267 X 4/12		

09/01/16	Interest Payable	200	
	Interest Expense	1,511**	
	Notes Payable		
	(\$30,000-\$1,111*)	28,889	
	Cash		30,600
	* (\$2,267 - \$600 - \$556)		
	** (\$2,267 - \$756)		

Year	8% Interest	Payment	Balance
09/01/14			\$26,790
09/01/15	\$2,143	(\$600)	28,333
09/01/16	2,267	(600)	30,000

	<u>Non-interest-bearing note.</u>		
09/01/14	Equipment [part (a)]	25,720	
	Notes Payable		25,720
12/31/14	Interest Expense	686*	
	Notes Payable		686
	*(\$25,720 X 8% X 4/12) or \$2,058 X 4/12		

Year	8% Interest	Balance
09/01/14		\$25,720
09/01/15	\$2,058	27,778
09/01/16	2,222	30,000

EXERCISE 10-16 (Continued)

09/01/15	Interest Expense	1,372**	
	Notes Payable		1,372
	**(\$25,720 X 8% X 8/12) or (\$2,058 – \$686)		
12/31/15	Interest Expense	741	
	Notes Payable		741
	(\$27,778 X 8% X 4/12) or \$2,222 X 4/12		
09/01/16	Interest Expense	1,481*	
	Notes Payable	30,000	
	Notes Payable		1,481
	Cash.....		30,000
	* \$2,222 – \$741		

EXERCISE 10-17 (15-20 minutes)

Depreciation Expense	700	
Accumulated Depreciation—Equipment		700
(\$11,200 – \$700 = \$10,500; \$10,500 ÷ 5 = \$2,100; \$2,100 X 4/12 = \$700)		

Equipment (New)	15,200 **	
Accumulated Depreciation—Equipment	7,000	
Gain on Disposal of Equipment		1,000*
Equipment (Old)		11,200
Cash		10,000

*Cost of old asset	\$11,200
Accum. depr. (\$6,300 + \$700)	<u>(7,000)</u>
Carrying amount	4,200
Fair market value of old asset	<u>(5,200)</u>
Gain on disposal of equipment	<u>\$ 1,000</u>

**Cash paid	\$10,000
Fair value of old melter	<u>5,200</u>
Cost of new melter	<u>\$15,200</u>

The transaction is monetary since there is significant cash involved. Cash makes up 66% ($\$10,000 / [\$10,000 + \$5,200]$) of the fair value of the transaction. A gain is recognized because the earnings process is complete and the company's economic circumstances have changed due to this transaction.

EXERCISE 10-18 (20-25 minutes)

(a) The exchange has commercial substance:

Stacey Company Limited:

Equipment (New)	28,200	
Accumulated Depreciation – Equipment	31,250	
Equipment (Old)		50,000
Cash		3,200
Gain on Disposal of Equipment		6,250

Valuation of new equipment:

Fair value of	\$ 25,000
equip. given	
Cash	<u>3,200</u>
New equip.	<u>\$28,200</u>

Calculation of gain:

Fair value of old	
equipment	\$25,000
Book value of old	
equipment	<u>(18,750)</u>
Gain on disposal	<u>\$ 6,250</u>

Note: Since little cash is involved, the transaction is considered non-monetary.

Chokar Company Limited:

Cash	3,200	
Equipment (New)	24,800	
Accumulated Depreciation – Equipment	22,000	
Loss on Disposal of Equipment	5,000	
Equipment (Old)		55,000

Calculation of loss:

Book value of old equipment	\$33,000
Fair value of old equipment	<u>28,000</u>
Loss on exchange	<u>\$ 5,000</u>

EXERCISE 10-18 (Continued)

(b) The exchange does not have commercial substance:

Stacey Company Limited:

Equipment (New)	21,950	
Accumulated Depreciation – Equipment	31,250	
Equipment (Old)		50,000
Cash		3,200

Valuation of new equipment:

Book value of old

 equipment \$ 18,750

Cash 3,200

New equipment \$21,950

Chokar Company Limited:

Cash	3,200	
Equipment (New)**	24,800	
Accumulated Depreciation - Equipment	22,000	
Loss on Disposal of Equipment	5,000	
Equipment (Old)		55,000

*Fair value of old

 equipment \$28,000

Book value of old

 equipment (33,000)

Loss on disposal \$ (5,000)

* The new equipment cannot be recorded at cost exceeding its fair value of \$28,000 adjusted for the cash received of \$3,200.

EXERCISE 10-18 (Continued)

- (c) In determining whether the transaction has commercial substance the two companies would need to determine if they remain in the same economic position after the exchange as before. If the amount, timing, or risk of future cash flows associated with the equipment received is different from the configuration of cash flows for the equipment given up, or if the specific value of the part of the entity affected by the transaction has changed as a result, the transaction has commercial substance.

EXERCISE 10-19 (15-20 minutes)

(a)	Equipment (New).....	50,100*	
	Accumulated Depreciation—		
	Equipment.....	20,000	
	Equipment (Old).....		65,000
	Cash.....		5,100

Valuation of new equipment:

Cash	\$4,000
Installation cost	
(cash)	1,100
Book value of	
old equipment	<u>45,000</u>
New equipment	<u>\$50,100</u>

Since little cash is involved, the transaction is considered nonmonetary. The transaction does not have commercial substance, therefore the exchange is recorded at the carrying amount of the asset(s) given up, which is adjusted for the inclusion of any cash or other monetary assets.

(b)	Equipment (New).....	55,900	
	Accumulated Depreciation—Equipment..	20,000	
	Gain on Disposal of Equipment		5,800
	Equipment (Old).....		65,000
	Cash.....		5,100

Valuation of new equipment:

Cash	\$4,000
Installation cost	
(cash)	1,100
Fair value of	
old equipment	<u>50,800</u>
New equipment	<u>\$55,900</u>

Calculation of gain:

Fair value of old	
equipment	\$50,800
Book value of old	
equipment	<u>(45,000)</u>
Gain on disposal	<u>\$ 5,800</u>

The transaction has commercial substance, therefore the exchange is recorded at the fair value of the asset(s) given up.

EXERCISE 10-20 (10-15 minutes)

This is a non-monetary transaction with commercial substance and both parties should record the transaction at fair value of what was given up. For Jamil, he has given up time valued at \$650. Similarly, for Ralph, he has given up time valued at \$500. The two parties to the transaction do not have to record the transaction at the same amount and would likely not be aware of the exact fair value of what they are receiving in exchange.

On Jamil's books of account:

Owner's Drawings	650	
Service Revenue		650

Since Jamil is receiving something that he uses on a personal basis and not a business asset or service, the benefit of the transaction is a personal one and is considered Drawings from the business.

On Ralph's books of account:

Office Expense	500	
Service Revenue		500

Since Ralph would usually pay for the professional services of an accountant to help in preparing his tax and GST returns, he is receiving a business service.

EXERCISE 10-21 (10-15 minutes)

(a) and (b)

Purchase price [(\$50,000 / \$195,000) X \$235,000]	\$60,256
Architectural drawings and engineering fees	18,000
Gutting of building	17,000
Construction	108,400
Provincial government grant*	<u>(75,000)</u>
Total cost	<u>\$128,656</u>

* The government grant could alternately be shown as a deferred credit and not be included as part of the asset's cost. In this case, the cost would be \$203,656.

Note that the building interior improvements are expected to last for the remainder of the useful life of the building. Since the building structure and the building interior and services have the same useful life and expected depreciation pattern, there is no need to separate into the component parts.

The effect of this capital asset on the company's would result from the depreciation of the asset's cost less its residual value over its useful life. The net effect would be the same whether the cost reduction method or the deferral method is used for the government grant, since the deferred credit would be amortized to revenue on the same basis as the related asset.

Cost reduction method:

$$\text{Depreciation expense} = \frac{(\$128,656 - \$65,000)}{20 \text{ years}} = \underline{\underline{\$3,182.80}}$$

Deferral method:

$$\text{Depreciation expense} = \frac{(\$203,656 - \$65,000)}{20 \text{ years}} = \$6,932.80$$

$$\begin{aligned} \text{Amortization of deferred credit to revenue} \\ = \frac{\$75,000}{20 \text{ years}} = \underline{\underline{(3,750.00)}} \end{aligned}$$

$$\text{Net effect on income statement} \quad \underline{\underline{\$3,182.80}}$$

EXERCISE 10-21 (Continued)

(c) Cost Reduction Method:

Lightstone Equipment Ltd.
Statement of Financial Position
August 31, 2015

Property, Plant and Equipment:

Building	\$128,656	
Less: Accumulated Depreciation	<u>(3,183)</u>	\$125,473

Lightstone Equipment Ltd.
Income Statement
For the year ended August 31, 2015

Operating expenses:

Depreciation expense	\$3,183

Deferral Method:

Lightstone Equipment Ltd.
Statement of Financial Position
August 31, 2015

Property, Plant and Equipment:

Building	\$203,656	
Less: Accumulated Depreciation	(6,933)	
Less: Deferred Government Grant*	<u>(71,250)</u>	\$125,473

Lightstone Equipment Ltd.
Income Statement
For the year ended August 31, 2015

Operating expenses:

Depreciation expense	\$6,933

Other revenues:

Revenue – Government Grants**	<u>3,750</u>
	\$3,183

* The Deferred Government Grant could also be shown in Long-term Liabilities.

** The Revenue - Government Grants could also be shown netted against Depreciation Expense.

EXERCISE 10-22 (15-20 minutes)

(a)

Under IFRS, separate standards for biological assets are set out in IAS 41 *Agriculture*. IAS 41 defines a biological asset as a living animal or plant; therefore grapevines would be covered by the standard and considered a biological asset. Biological assets are measured initially, and at every date of the statement of financial position, at fair value less costs to sell, with changes in value recognized on the income statement as the values change. IAS 41 does not mandate how costs associated with the grapevines (i.e., the new grape trellis system) should be accounted for. They could be capitalized as part of the biological asset, or expensed directly. As long as the expenditures do not create assets that still exist at year end, the net impact on the financial statements will be the same. The carrying amount of the grapevines on the statement of financial position at December 31, 2014 will be $\$295,000 - (4\% \times \$295,000) = \$283,200$, or fair value less costs to sell at that date.

Major repairs to sprayer equipment and new customer wine cellar qualify for capitalization as property, plant, and equipment. Grapevine fertilizer and harvesting labour would likely be included in the cost of inventory.

(b)

Because biological assets are measured at every date of the statement of financial position at fair value less costs to sell, the carrying amount of the grapevines on the statement of financial position at December 31, 2015 will be $\$316,800$ ($\$330,000 - 4\%$ of $\$330,000$).

(c)

Under ASPE, the general principles established for PP&E assets are also followed for biological assets. Therefore the carrying amount of the grapevines may be based on cost of the grapevines.

EXERCISE 10-23 (15-20 minutes)

(a) Fair value model

If the company chooses to measure the investment property under the fair value model it will have to recognize in net income or loss, for each period, changes in fair value from year to year. Thus, the impact on net income or loss for the various years would be summarized as follows:

Year	Cost (millions)	Carrying Value before adjustment (millions)	Fair Value (millions)	Net income (loss)
2014	\$50	\$50	\$50	\$0
2015		50	60	10
2016		60	63	3
2017		63	58	(5)

December 31, 2015

Investment Property.....	10,000,000	
Gain in Value of Investment Property..		10,000,000

December 31, 2016

Investment Property.....	3,000,000	
Gain in Value of Investment Property..		3,000,000

December 31, 2017

Loss in Value of Investment Property.....	5,000,000	
Investment Property.....		5,000,000

EXERCISE 10-23 (Continued)

(b) Cost model

If the company decided to measure the investment property under the cost model it would have to account for it under IAS 16 using the cost model prescribed under that standard (which requires that the asset be carried at its cost less accumulated depreciation and any accumulated impairment losses). According to IAS 16, when investment property is measured under the cost model, the fluctuations in the fair value of the investment property from year to year are not recorded and thus would have no effect on net income. Instead, depreciation will be the only charge to net income or loss for each period (unless there is impairment, which will also be a charge to the net income or loss for the year). In addition, the building should be componentized into its major components if they have relative significant costs and/or differing useful lives or depreciation patterns. However, in this question, not enough information is given to separate the building into its component parts, thus only one buildings account has been used.

December 31, 2014 (and each December 31 through to 2017)

Depreciation Expense.....	2,250,000	
Accumulated Depreciation –		
Buildings		2,250,000
(\$50,000,000 – \$5,000,000) ÷ 20)		

EXERCISE 10-24 (15-20 minutes)

(a)

The cost model in IAS 16 requires the asset to be depreciated over its useful life using a method that corresponds to how Nevine receives the economic benefits the asset offers. The annual straight-line depreciation is calculated as follows:

The original acquisition cost would have been allocated as follows since Nevine is using the cost model and thus must depreciate the shopping centre components:

Land	25%	\$2,700,000
Building	<u>75%</u>	<u>8,100,000</u>
	100%	\$10,800,000

Shopping centre building annual depreciation:

$$= (\$8,100,000 - \$1,100,000) \div 35 \text{ years} = \$200,000 \text{ per year}$$

Each May 31 the following entry is recorded to recognize depreciation:

Depreciation Expense.....	200,000	
Accumulated Depreciation –		
Buildings		200,000

The statement of financial position (partial) presentation would be:

	May 31, 2014	May 31, 2015	May 31, 2016
Land, at cost	\$2,700,000	\$2,700,000	\$2,700,000
Building, at cost			
less accum. depr.	<u>\$7,900,000</u>	<u>7,700,000</u>	<u>7,500,000</u>
	<u>\$10,600,000</u>	<u>\$10,400,000</u>	<u>\$10,200,000</u>

Note that the fair value of the investment property must be disclosed in the financial statements, even if the cost model is used.

EXERCISE 10-24 (Continued)

(b)

Because cost allocation and depreciation are not issues under the fair value model, it is likely that Nevine would not separate out the cost of the land from that of the building and its components as indicated in cost model allocation of acquisition costs described in (a). Therefore, assume that the investment property is in an account entitled Investment Property—Shopping Centre that is carried at \$10.8 million as of June 2, 2013.

On May 31, 2014 the property is written down to its fair value at that date of \$10,500,000. On May 31, 2015 and 2016, the asset account is adjusted to \$10,400,000 and \$11,000,000 respectively. Changes in the fair values are recognized in income statement profit or loss and the property is reported on the statement of financial position at its fair value at each statement of financial position date. The following entries are made:

May 31, 2014

Loss in Value of Investment Property.....	300,000	
Investment Property.....		300,000
(\$10,800,000 – \$10,500,000)		

May 31, 2015

Loss in Value of Investment Property.....	100,000	
Investment Property.....		100,000
(\$10,500,000 – \$10,400,000)		

May 31, 2016

Investment Property.....	600,000	
Gain in Value of Investment Property..		600,000
(\$11,000,000 – \$10,400,000)		

EXERCISE 10-24 (Continued)

The cost of the investment property on June 2, 2013 is the acquisition cost of \$10,800,000. If a statement of financial position were prepared shortly after that date, for example on June 5, 2013, what amount would be reported under the fair value model? Because fair value does not include transaction costs, the fair value would exclude the legal (\$300,000) and survey and transfer fees (\$500,000) added into the cost of the asset. Its fair value at that time is \$10,000,000 and a loss of $\$10,800,000 - \$10,000,000 = \$800,000$ would be recognized. At May 31, 2014 a gain of $\$10,500,000 - \$10,000,000 = \$500,000$ would be reported instead of a \$300,000 loss.

EXERCISE 10-25 (20-25 minutes)

(a)

Asset Adjustment Method

Accumulated Depreciation – Buildings	100,000	
Buildings.....		100,000

The Buildings account is now \$300,000 - \$100,000 = \$200,000, and the related Accumulated Depreciation account is zero.

Revaluation Gain or Loss	40,000	
Buildings (\$200,000–\$160,000).....		40,000

Accumulated Depreciation – Equipment	40,000	
Equipment		40,000

The Equipment account is now \$120,000 - \$40,000 = \$80,000, and the related Accumulated Depreciation account is zero.

Equipment (\$90,000–\$80,000).....	10,000	
Revaluation Surplus (OCI).....		10,000

IAS 16 paragraphs 31-42 require that asset revaluation surpluses be prepared on an individual asset basis (reference is made to the revaluation of asset items, not asset classes as a group). This is consistent with the application of the LCNRV rule for inventory which must be applied on an item-by-item basis.

EXERCISE 10-25 (Continued)

(b)

Depreciation Expense.....	8,000	
Accumulated Depreciation – Buildings		8,000
(\$160,000 ÷ 20)		

Depreciation Expense.....	11,250	
Accumulated Depreciation – Equipment.....		11,250
(\$90,000 ÷ 8)		

(c)

Proportionate Method

Building:

	Before revaluation		Proportional after revaluation
Building	\$300,000	x 160/200	\$240,000
Accumulated depreciation	<u>100,000</u>	x 160/200	<u>80,000</u>
Carrying amount	<u>\$200,000</u>	x 160/200	<u>\$160,000</u>

Equipment:

	Before revaluation		Proportional after revaluation
Equipment	\$120,000	x 90/80	\$135,000
Accumulated depreciation	<u>40,000</u>	x 90/80	<u>45,000</u>
Carrying amount	<u>\$ 80,000</u>	x 90/80	<u>\$ 90,000</u>

The journal entry to revalue the building on December 31, 2013:

Accumulated Depreciation – Buildings	20,000	
Revaluation Gain or Loss	40,000	
Buildings.....		60,000

EXERCISE 10-25 (Continued)

The journal entry to revalue the equipment on December 31, 2013:

Equipment.....	15,000	
Accumulated Depreciation – Equipment.....		5,000
Revaluation Surplus (OCI).....		10,000

The journal entries to record depreciation expense for the year ended December 31, 2014:

Depreciation Expense.....	8,000	
Accumulated Depreciation – Buildings		8,000
(\$160,000 ÷ 20)		

Depreciation Expense.....	11,250	
Accumulated Depreciation – Equipment.....		11,250
(\$90,000 ÷ 8)		

EXERCISE 10-26 (25-30 minutes)

(a)

December 31, 2014

Depreciation Expense	5,000	
Accumulated Depreciation –		
Buildings		5,000
(\$125,000 ÷ 25)		

(b)

December 31, 2015

Depreciation Expense	5,000	
Accumulated Depreciation –		
Buildings		5,000
(\$125,000 ÷ 25)		

(c)

December 31, 2016

Depreciation Expense	5,000	
Accumulated Depreciation –		
Buildings		5,000
(\$125,000 ÷ 25)		

Accumulated Depreciation – Buildings	15,000	
Buildings		15,000

The Buildings account is now \$125,000 - \$15,000 = \$110,000, and the related Accumulated Depreciation account is zero.

Buildings (\$120,000 – \$110,000)	10,000	
Revaluation Surplus (OCI)		10,000

EXERCISE 10-26 (Continued)

(d)

Effective January 1, 2017, the depreciation rate is adjusted to reflect the change in the depreciable amount. The \$120,000 January 1, 2017 carrying amount is now allocated over the remaining 22 (25 – 3) years. The new rate, therefore, is \$5,455 ($\$120,000 \div 22$) per year.

December 31, 2017

Depreciation Expense.....	5,455	
Accumulated Depreciation –		
Buildings		5,455
(\$120,000 ÷ (25 – 3))		

EXERCISE 10-26 (Continued)

(e)

December 31, 2019

Depreciation Expense.....	5,455	
Accumulated Depreciation –		
Buildings.....		5,455
(\$120,000 ÷ (25 – 3))		

Using the asset adjustment method, remember that the Accumulated Depreciation account was reduced to \$0 at the end of 2016. Its balance three years later on December 31, 2019 therefore is \$16,365 (\$5,455 x 3), and the Buildings account under this method is still at the December 31, 2016 revaluation amount of \$120,000.

Accumulated Depreciation – Buildings	16,365	
Buildings.....		16,365
The Buildings account is now \$120,000 - \$16,365 = \$103,635, and the related Accumulated Depreciation account is zero.		

Revaluation Surplus (OCI).....	10,000	
Revaluation Gain or Loss	3,635	
Buildings (\$103,635 – \$90,000).....		13,635

Note: This entire solution assumes that the company has applied IFRS, as the revaluation model is not permitted under ASPE.

EXERCISE 10-26 (Continued)

(f)

Proportionate Method

December 31, 2016

	<u>Before revaluation</u>		<u>Proportional after revaluation</u>
Building	\$125,000	x 120/110	\$136,364
Accumulated depreciation	<u>15,000</u>	x 120/110	<u>16,364</u>
Carrying amount	<u>\$ 110,000</u>	x 120/110	<u>\$ 120,000</u>

Buildings.....	11,364
Accumulated Depreciation– Buildings.....	1,364
Revaluation Surplus (OCI).....	10,000

December 31, 2019

	<u>Before revaluation</u>	x 90,000 ÷ 103,635	<u>Proportional after revaluation</u>
Building	\$136,364		\$118,423
Accumulated depreciation	<u>32,729</u>		<u>28,423</u>
Carrying amount	<u>\$ 103,635</u>		<u>\$ 90,000</u>

Accumulated Depreciation–Buildings	4,306
Revaluation Surplus (OCI).....	10,000
Revaluation Gain or Loss	3,635
Buildings.....	17,941

Note: This entire solution assumes that the company has applied IFRS, as the revaluation model is not permitted under ASPE.

EXERCISE 10-26 (Continued)

(g)

The revaluation model results in more relevant information on the statement of financial position, because the building is revalued to fair value every three years. An investor may be better able to assess the current economic position of the company with this information. However, the revaluation model increases the risk of error and bias in the financial statements, because the revaluation model uses a fair value amount that is not necessarily supported by a transaction with commercial substance.

Fair value is defined as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”, and independent valuers and market-related evidence are used to the extent possible, but other methods may have to be used if necessary.

An investor in ABC should be aware that the fair value amount that is applied in the revaluation model requires a degree of professional judgement in calculation and application, and that the determination of fair value can have a material affect on the statement of financial position as well as the statement of comprehensive income.

EXERCISE 10-27 (20-25 minutes)

- As the building was acquired in 1974, based on the information in the question it does not appear that the building has been recorded in the accounts in its component parts, but rather, grouped together in the buildings account. Thus the old roof was included in the buildings account and must be removed from that account. Since the building structure and the roof have different remaining useful lives, they should be recorded in separate accounts:

Buildings–Roof	2,500,000	
Cash		2,500,000

Accumulated Depreciation—		
Buildings–Roof * (\$1,000,000 X	800,000	
40/50)		
Loss on Disposal of Buildings	200,000	
Buildings–Roof		1,000,000

- Maintenance and Repairs Expense .. 57,000
 Cash..... 57,000

- Buildings–HVAC 700,000
 Cash..... 700,000

Note: Even though the problem doesn't provide information that allows the students to estimate the cost of the old heating system, an IFRS requirement is to estimate the cost of the old heating system and remove the cost along with any accumulated depreciation that would have been charged on the old heating system, as well as recognize a loss, if not fully depreciated.

- Maintenance and Repairs Expense .. 44,000
 Cash..... 44,000

EXERCISE 10-28 (15-20 minutes)

(a)

1/30	Accumulated Depreciation—		
	Buildings—Structure.....	112,200*	
	Loss on Disposal of Buildings.....	24,900**	
	Buildings—Structure		132,000
	Cash.....		5,100

***(5% X \$132,000 = \$6,600; \$6,600 X 17 = \$112,200)**

****(\$132,000 – \$112,200) + \$5,100**

3/10	Maintenance and Repairs Expense	2,900	
	Cash.....		2,900

3/20	Maintenance and Repairs Expense	85	
	Cash.....		85

5/18	Machinery (new).....	5,500	
	Accumulated Depreciation—Machinery.....	2,100*	
	Loss on Disposal of Machinery	1,400**	
	Machinery (old)		3,500
	Cash.....		5,500

***(10% X \$3,500 = \$350 X 6 = \$2,100)**

****(\$3,500 – \$2,100)**

6/23	Maintenance and Repairs Expense	6,900	
	Cash.....		6,900

- (b) The answer would not change. Regardless of the increase in useful life, the amount involved would not be considered material and would therefore be expensed in the current year. The estimate of useful life would be revised for the purposes of calculating depreciation.

EXERCISE 10-29 (10-15 minutes)

- (a) C
- (b) E
- (c) C
- (d) C
- (e) C
- (f) C
- (g) C
- (h) E
- (i) C
- (j) E or C if the company prepares financial statements in accordance with ASPE; C if the company prepares financial statements in accordance with IFRS.
- (k) C
- (l) C

***EXERCISE 10-30 (20-25 minutes)**

(a) Calculation of Weighted-Average Accumulated Expenditures

<u>Expenditures</u>			<u>Capitalization</u>		<u>Weighted-Average</u>
<u>Date</u>	<u>Amount</u>	X	<u>Period</u>	=	<u>Accumulated Expenditures</u>
Mar. 1	\$ 360,000		10/12		\$ 300,000
June 1	600,000		7/12		350,000
July 1	1,500,000		6/12		750,000
Dec. 1	1,500,000		1/12		125,000
	<u>\$3,960,000</u>				<u>\$1,525,000</u>

Total weighted-average accumulated expenditures	\$1,525,000
Less: financed by specific construction loan	<u>3,000,000</u>
Weighted-average accumulated expenditures financed by general borrowings (cannot be less than zero)	<u>\$0</u>

Capitalization rate calculation on general borrowings:

	<u>Principal</u>	<u>Borrowing Cost</u>
13%, \$4 million bond	\$4,000,000	\$520,000
10%, \$1.6 million note	<u>1,600,000</u>	<u>160,000</u>
	<u>\$5,600,000</u>	<u>\$680,000</u>

$$\text{Capitalization rate} = \frac{\$680,000}{\$5,600,000} = \underline{\underline{12.14\%}}$$

*EXERCISE 10-30 (Continued)

Avoidable costs on asset-specific debt	
(\$1,525,000* x 12%)	\$183,000
Avoidable costs on general debt	
(\$0 x 12.14%)	0
Total avoidable borrowing costs	<u>\$183,000</u>

* The asset-specific debt was \$3,000,000, however, the avoidable interest cost is calculated by capping the debt at weighted-average accumulated expenditures (\$1,525,000 in this case). The weighted expenditures are less than the amount of specific borrowing; the specific borrowing rate is used.

Borrowing costs to be capitalized = Total avoidable borrowing costs – investment income (resulting from investment of idle funds) = \$183,000 – \$49,000 = \$134,000

(b)

Actual interest paid during the year:

\$3,000,000 X 12%	\$ 360,000
\$4,000,000 X 13%	520,000
\$1,600,000 X 10%	160,000
	<u>\$1,040,000</u>

Allocation of Capitalized Building Components

<u>Expenditures</u>		Buildings –	Buildings	Buildings –
Date	Total	Structure	– Roof	HVAC
Mar. 1	\$ 360,000	\$ 360,000	\$ 0	\$ 0
June 1	600,000	600,000	0	0
July 1	1,500,000	1,100,000	400,000	0
Dec. 1	1,500,000	800,000	0	700,000
	<u>\$3,960,000</u>	<u>\$2,860,000</u>	<u>\$400,000</u>	<u>\$700,000</u>
	100%	72.22%	10.10%	17.68%

***EXERCISE 10-30 (Continued)**

Buildings – Structure (\$134,000 x 72.22%)	96,775	
Buildings – Roof (\$134,000 x 10.10%).....	13,534	
Buildings – HVAC (\$134,000 x 17.68%).....	23,691	
Interest Expense*	906,000	
Cash		1,040,000
 *Actual interest for year	 \$1,040,000	
Less: Amount capitalized	(134,000)	
Interest expense debit	<u>\$ 906,000</u>	

***EXERCISE 10-31 (20-25 minutes)**

(a) Oksana Inc. should report \$55,000* as capitalized borrowing costs at 12/31/14. Since the weighted-average accumulated expenditures is less than the asset-specific debt, the amount of interest to be capitalized is

$$\begin{aligned} &\text{Weighted-Average Accumulated Expenditures} \times \text{Interest Rate} \\ &\quad \text{on Asset-Specific Debt} \\ &= \text{Avoidable Borrowing Costs on the Asset-Specific Debt} \end{aligned}$$

Specifically, since Oksana Inc. has outstanding debt incurred specifically for the construction project, in an amount greater than the weighted-average accumulated expenditures of \$800,000, the interest rate on the asset-specific debt of 10% is used for capitalization purposes. Therefore, the avoidable borrowing costs on the asset-specific debt is \$80,000 (\$800,000 X .10), which is less than the actual interest.

Finally, the \$25,000 of interest income earned from temporary investment of the unexpended portion of the loan, is offset against the amount eligible for capitalization.

$$*(\$80,000 - \$25,000 = \$55,000)$$

***EXERCISE 10-31 (Continued)**

(b) \$47,000—Under IFRS, assets that qualify for capitalization of borrowing costs are: assets that require substantial time to get ready for their intended use or sale. This may include inventories; items of property, plant, and equipment; investment properties; or intangible assets. Therefore, qualifying assets include assets constructed for an enterprise's own use (i.e. the warehouse) and assets intended for sale or lease that are produced as discrete projects (i.e. the special-order inventory). In addition, borrowing costs incurred on routinely manufactured inventories that require an extended time period for completion would be capitalized.

(c) \$0*—Capitalization of borrowing costs begins on the date when: (1) expenditures for the asset have been made, (2) activities that are necessary to get the asset ready for its intended use are in progress, and (3) borrowing costs are being incurred. The amount to be capitalized is determined by applying a capitalization rate to the weighted-average amount of accumulated expenditures for the asset during the period.

Because the \$7,000,000 of expenditures incurred for the year ended April 30, 2015 were incurred evenly throughout the year, the weighted-average amount of expenditures for the year is \$3,500,000 ($\$7,000,000 \div 2$). Therefore, the maximum amount of borrowing costs that could be capitalized is \$385,000 ($\$3,500,000 \times 11\%$). In any period, the total amount of borrowing costs to be capitalized shall not exceed the total amount of borrowing costs incurred by the enterprise. (Total borrowing costs incurred was \$1,100,000). Finally, the \$650,000 of interest income earned from temporary investment of the unexpended portion of the loan is offset against the amount eligible for capitalization.

***($\$385,000 - \$650,000 = \$0$ of capitalized borrowing costs)**

***EXERCISE 10-32 (20-25 minutes)**

Step 1—Determine the expenditures on the qualifying asset.

Calculation of Weighted-Average Accumulated Expenditures

Expenditures			Capitalization		Weighted-Average
Date	Amount	X	Period	=	Accumulated Expenditures
Feb. 1	\$ 120,000		11/12		\$110,000
Mar. 1	24,000		10/12		20,000
July 1	60,000		6/12		30,000
Dec. 1	<u>180,000</u>		1/12		<u>15,000</u>
	<u><u>\$384,000</u></u>				<u><u>\$175,000</u></u>

Step 2—Determine the avoidable borrowing costs on the asset-specific debt.

Avoidable borrowing costs on asset-specific borrowing:

Asset-specific borrowing (weighted) = \$100,000 x 11/12 = \$91,667.

Related borrowing costs = \$91,667 x 12% = \$11,000.

Step 3—Determine the avoidable borrowing costs on the non-asset-specific debt.

Total weighted-average accumulated expenditures	\$175,000
Less: financed by specific construction loan (\$100,000 x 11/12)	<u>91,667</u>
Weighted-average accumulated expenditures financed by general borrowings (cannot be less than zero)	<u>\$ 83,333</u>

*EXERCISE 10-32 (Continued)

Calculation of capitalization rate on general borrowings:

	Principal amount	Weight	Weighted debt outstanding	Borrowing Cost
7% 10-year bonds, issued June 15, 2008	\$500,000	12/12	\$500,000	\$35,000
6% 12-year bonds, issued May 1, 2014	300,000	8/12	200,000	12,000
9% 15-year bonds, issued May 1, 1999, matured May 1, 2014	300,000	4/12	<u>100,000</u>	<u>9,000</u>
			<u>\$800,000</u>	<u>\$56,000</u>

$$\text{Capitalization rate} = \frac{\$56,000}{\$800,000} = \underline{7\%}$$

Avoidable borrowing costs on non-asset-specific debt
= \$83,333 x 7% = \$5,833.

Step 4—Determine the borrowing costs to capitalize by applying the capitalization rate to the appropriate expenditures on the qualifying asset.

Avoidable borrowing costs on asset-specific debt	\$11,000
Avoidable borrowing costs on non-asset-specific debt	<u>5,833</u>
Total avoidable borrowing costs	<u>\$16,833</u>

Total actual borrowing costs incurred during the year:

Construction note, \$100,000 x 12% x 11/12	\$11,000
10-year bond, \$500,000 x 7% x 12/12	35,000
12-year bond, \$300,000 x 6% x 8/12	12,000
15-year bond, \$300,000 x 9% x 4/12	<u>9,000</u>
	<u>\$67,000</u>

The amount of the borrowing costs to capitalize is the lower of the avoidable and the actual, which is \$16,833.

TIME AND PURPOSE OF PROBLEMS

Problem 10-1 (Time 35-45 minutes)

Purpose—to provide a property, plant, and equipment problem consisting of three transactions that have to be recorded—(1) an asset purchased on a deferred payment contract, (2) a lump sum purchase, and (3) a nonmonetary exchange.

Problem 10-2 (Time 35-40 minutes)

Purpose—to provide a problem involving the proper classification of costs related to property, plant, and equipment. Property, plant, and equipment must be segregated into land, buildings, leasehold improvements, and machinery and equipment for purposes of the analysis. Costs such as demolition costs, real estate commissions, imputed interest and royalty payments are presented. An excellent problem for reviewing the first part of this chapter.

Problem 10-3 (Time 40-55 minutes)

Purpose—to provide a problem involving the proper classification of costs related to property, plant, and equipment. Such costs as land, freight and unloading, installation, parking lots, sales taxes, and machinery costs must be identified and appropriately classified. Also reviews calculations for double-declining and straight-line depreciation and calculation of gain or loss on disposal. An excellent problem for reviewing the first part of this chapter.

Problem 10-4 (Time 35-45 minutes)

Purpose—to provide a problem involving the proper classification of costs related to land and buildings. Typical transactions involve allocation of the cost of removal of a building, legal fees paid, general expenses, cost of organization, special tax assessments, etc. A good problem for providing a broad perspective as to the types of costs expensed and capitalized.

Problem 10-5 (Time 30-35 minutes)

Purpose—to provide the student with a problem in which schedules must be prepared on the costs of constructing a building, assuming an “increased income” approach and a “conservative” approach. Interest costs are included. The student must discuss which items can be included or omitted from the building’s cost under GAAP and the implications of the choice.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 10-6 (Time 30-40 minutes)

Purpose—to provide a problem involving the proper classification of costs related to capital assets. The transactions include exchanges for shares and a deferred payment contract as well as costs subsequent to acquisition. The student is asked to consider alternative methods to account for the transactions.

Problem 10-7 (Time 35-45 minutes)

Purpose—to provide the student with a problem involving the exchange of machinery. Four different exchange transactions are possible, and journal entries are required for each possible transaction. The exchange transactions cover the receipt and disposition of cash as well as the purchase of a machine from a dealer of machinery.

Problem 10-8 (Time 30-40 minutes)

Purpose—to provide the student with another problem involving the exchange of productive assets. This problem is unusual because it involves the exchange of two assets for inventory and the size of the boot is less than 10%. As a result, the entire transaction is nonmonetary in nature.

Problem 10-9 (Time 20-30 minutes)

Purpose—to provide the student with a problem to apply the revaluation model over multiple years with multiple classes of assets.

Problem 10-10 (Time 35-45 minutes)

Purpose—to provide the student with a problem to apply the revaluation model, and to compare and contrast the asset adjustment method with the proportionate method.

Problem 10-11 (Time 20-25 minutes)

Purpose—to provide the student with a problem to apply the fair value model, and to compare and contrast the fair value model with the cost model.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 10-12 (Time 20-25 minutes)

Purpose—to provide a problem involving the proper classification of costs related to capital assets. The transactions include repairs, additions and modifications to a building. The student is asked to consider whether the various costs should be capitalized or expensed and to consider alternative methods to account for the transactions.

***Problem 10-13 (Time 25-35 minutes)**

Purpose—to provide the student with a problem in which schedules must be prepared on the costs of acquiring land and the costs of constructing a building. Interest costs to be capitalized must be calculated over two accounting periods.

***Problem 10-14 (Time 20-30 minutes)**

Purpose—to provide the student with a problem to calculate capitalized interest and to present disclosures related to capitalized interest.

SOLUTIONS TO PROBLEMS

PROBLEM 10-1

- (a) The major characteristics of tangible capital assets, such as land, buildings, and equipment that differentiate them from other types of assets are presented below.
1. Plant assets are acquired for use in the regular operations of the enterprise and are not for resale.
 2. Tangible capital assets possess physical substance or existence and are thus differentiated from intangible assets such as patents and goodwill. Unlike other assets that possess physical substance (i.e., raw material), property, plant, and equipment do not physically become part of the product held for resale.
 3. These assets are durable and long-term in nature and are used to earn income in more than one reporting period. They are usually subject to depreciation.
- (b) *Transaction 1.* To properly reflect cost, assets purchased on deferred payment contracts should be accounted for at the present value of the consideration exchanged between the contracting parties at the date of the consideration. When no interest rate is stated, interest must be imputed at a rate that approximates the rate that would be negotiated in an arm's-length transaction. In addition, all costs necessary to ready the asset for its intended use are considered to be costs of the asset. The government grant of \$2,000 can be applied directly to the asset or alternatively could be shown as a separate Deferred Credit – Government Grant and amortized in the same manner as the related asset.

Asset cost = Present value of the note + Freight + Installation – Government Grant

$$\begin{aligned}
 &= \frac{\$20,000}{\frac{1}{1.04} + \frac{1}{1.04^2} + \frac{1}{1.04^3} + \frac{1}{1.04^4}} \times 3.16986 + \$425 + \$500 - \$2,000 \\
 &= \$15,849 + \$425 + \$500 - \$2,000 \\
 &= \$14,774
 \end{aligned}$$

PROBLEM 10-1 (Continued)

Transaction 2. The lump-sum purchase of a group of assets should be accounted for by allocating the total cost among the various assets on the basis of their relative fair market values. The \$8,000 of interest expense incurred for financing the purchase is a period cost and is not a factor in determining asset cost.

Inventory	$\$210,000 \times (\$50,000 / \$250,000) = \$42,000$
Land	$\$210,000 \times (\$80,000 / \$250,000) = \$67,200$
Building	$\$210,000 \times (\$120,000 / \$250,000) = \$100,800$

Transaction 3. The cost of a nonmonetary asset acquired in exchange for dissimilar nonmonetary assets should be recorded at the fair value of the assets given up plus any cash paid, unless the fair value of the asset received is more reliably measurable. Since only the fair value of the new machine is provided, it will be used as the cost. Furthermore, any gain or loss on exchange is also recognized.

Cost of new machine	<u>\$64,000</u>

PROBLEM 10-1 (Continued)

- (c) 1. A building purchased for speculative purposes is not a capital asset as it is not being used in normal operations. The building is more appropriately classified as an investment. Alternatively, the property may be classified as an investment property (a special classification of a tangible capital asset). An investment property as defined in IAS 40, is a “property held to earn rentals or for capital appreciation or both, rather than for (a) use in the production or supply of goods or services or for administration purposes; or (b) sale in the ordinary course of business.” If the property qualifies as an investment property under IAS 40, then either the cost model or the fair value model can be used to measure and account for the property.
2. The two-year insurance policy covering plant equipment is not a tangible capital asset as it is not long-term in nature, not subject to depreciation, and has no physical substance. This policy is more appropriately classified as a current asset (prepaid insurance).
3. The rights for the exclusive use of a process used in the manufacture of ballet shoes are not tangible capital assets as they have no physical substance. The rights should be classified as intangible assets.

PROBLEM 10-2

(a)
Golden Corporation
ANALYSIS OF LAND ACCOUNT
for 2014

Balance at January 1, 2014	\$ 310,000

Land site number 621

Acquisition cost	\$800,000	
Commission to real estate agent	47,000	
Clearing costs	\$33,500	
Less amounts recovered	<u>11,000</u>	<u>22,500</u>
Total land site number 621		869,500

Land site number 622

Acquisition cost	560,000	
Demolition cost	<u>28,000</u>	
Total land site number 622		<u>588,000</u>
Balance at December 31, 2014		<u><u>\$1,767,500</u></u>

Golden Corporation
ANALYSIS OF BUILDINGS – STRUCTURE ACCOUNT
for 2014

Balance at January 1, 2014	\$ 883,000

**Cost of new building constructed
on land site number 622**

Construction costs	\$340,000	
Excavation fees	38,000	
Architectural design fees	15,000	
Building permit fee	<u>2,500</u>	<u>395,500</u>
Balance at December 31, 2014		<u><u>\$1,278,500</u></u>

PROBLEM 10-2 (Continued)

Golden Corporation ANALYSIS OF BUILDINGS – ROOF ACCOUNT for 2014

Balance at January 1, 2014	\$ 0
Cost of new building constructed on land site number 622	
“Green roof”*	<u>36,000</u>
Balance at December 31, 2014	<u>\$36,000</u>

* The “green roof” requires a separate account from building structure as it has a different useful life than the building. The “green roof” is expected to require retrofitting every 7 years, so it must be recognized separately from the remainder of the building.

Golden Corporation ANALYSIS OF LEASEHOLD IMPROVEMENTS ACCOUNT for 2014

Balance at January 1, 2014	\$705,000
Office space	<u>89,000</u>
Balance at December 31, 2014	<u>\$794,000</u>

Golden Corporation ANALYSIS OF EQUIPMENT ACCOUNT for 2014

Balance at January 1, 2014		\$845,000
Cost of the new machines acquired		
Invoice price	\$111,000	
Freight costs	3,300	
Installation costs	<u>3,600</u>	<u>117,900</u>
Balance at December 31, 2014		<u>\$962,900</u>

PROBLEM 10-2 (Continued)

- (b) Items in the fact situation which were not used to determine the answer to (a) above are as follows:
1. Interest imputed on common share financing is not recorded and thus does not appear in any financial statement.
 2. Land site number 623, which was acquired for \$265,000, should be included in Golden's balance sheet as land held for resale (investment section).
 3. Royalty payments of \$15,300 should be included as a normal operating expense on Golden's income statement.
- (c)
1. The interest imputed on common share financing is not included because it violates the historical cost principle.
 2. The land held for resale would be shown as an investment in order to provide information that is more relevant and useful to users. The land is not held for use in the production of goods and services, for rental to others, or for administrative purposes.
 3. The royalty payments are not a component of cost under the historical cost principle. They do not have future benefits and are a recurring period cost based on the usage of the machines.

PROBLEM 10-3

Webb Corporation
ANALYSIS OF LAND ACCOUNT
2014

Balance at January 1, 2014	\$300,000
Plant facility acquired from Knorman Corp. - fair value of land (share-based payment)	<u>230,000</u>
Balance at December 31, 2014	<u>\$530,000</u>

Webb Corporation
ANALYSIS OF LAND IMPROVEMENTS ACCOUNT
2014

Balance at January 1, 2014	\$140,000
Parking lots, streets, and sidewalks	<u>95,000</u>
Balance at December 31, 2014	<u>\$235,000</u>

Webb Corporation
ANALYSIS OF BUILDINGS ACCOUNT
2014

Balance at January 1, 2014	\$1,100,000
Plant facility acquired from Knorman Corp. —fair value of building (share-based payment)	<u>690,000</u>
Balance at December 31, 2014	<u>\$1,790,000</u>

PROBLEM 10-3 (Continued)

Webb Corporation ANALYSIS OF EQUIPMENT ACCOUNT 2014

Balance at January 1, 2014		\$ 960,000
Cost of new equipment acquired		
Invoice price	\$400,000	
Freight and unloading costs	13,000	
Sales taxes	28,000	
Installation costs	<u>26,000</u>	<u>467,000</u>
		\$1,427,000
 Deduct cost of machines disposed of		
Equipment scrapped June 30, 2014	80,000*	
Equipment sold July 1, 2014	<u>44,000*</u>	<u>124,000</u>
Balance at December 31, 2014		<u><u>\$1,303,000</u></u>

*(The accumulated depreciation account can be ignored for this part of the problem.)

- (b) Items in the fact situation that were not used to determine the answer to (a) above, are as follows:
1. The tract of land, which was acquired for \$150,000 as a potential future building site, should be included on Webb's balance sheet as an investment in land.
 2. The \$110,000 and \$320,000 book values respective to the land and building carried on Knorman's books at the exchange date are not used by Webb.
 3. The \$20,000 GST paid on the purchase of machinery and equipment is not included in the cost. It is recoverable as an input tax credit and would be debited to GST receivable.

PROBLEM 10-3 (Continued)

4. The \$12,080 loss (Schedule 2) incurred on the scrapping of a piece of equipment on June 30, 2014, should be included in the other expenses and losses section on Webb's income statement. The \$67,920 accumulated depreciation (Schedule 3) should be deducted from the accumulated depreciation—equipment account on Webb's balance sheet.
5. The \$3,000 loss on sale of equipment on July 1, 2014 (Schedule 4) should be included in the other expenses and losses section of Webb's income statement. The \$21,000 accumulated depreciation (Schedule 4) should be deducted from the accumulated depreciation—equipment account on Webb's balance sheet.

Schedule 2
Loss on Scrapping of Equipment
June 30, 2014

Cost, January 1, 2006	\$80,000
Accumulated depreciation (double-declining- balance method, 10-year life) January 1, 2006, to June 30, 2014 (Schedule 3)	<u>67,920</u>
Asset book value June 30, 2014	<u>\$12,080</u>
Loss on scrapping of machine	<u>\$12,080</u>

PROBLEM 10-3 (Continued)

Schedule 3
Accumulated Depreciation Using
Double-Declining-Balance Method
June 30, 2014
(Double-declining-balance rate is 20%)

Year	Book Value at Beginning of Year	Depreciation Expense	Accumulated Depreciation
2006	\$80,000	\$16,000	\$16,000
2007	64,000	12,800	28,800
2008	51,200	10,240	39,040
2009	40,960	8,192	47,232
2010	32,768	6,554	53,786
2011	26,214	5,243	59,029
2012	20,971	4,194	63,223
2013	16,777	3,355	66,578
2014 (6 months)	13,422	<u>1,342</u>	67,920
		<u><u>\$67,920</u></u>	

Schedule 4
Loss on Sale of Equipment
July 1, 2014

Cost, January 1, 2011	\$44,000
Depreciation (straight-line method, salvage value of \$2,000, 7-year life) January 1, 2011, to July 1, 2014 [$3\frac{1}{2}$ years X (\$44,000 – \$2,000) , 7]	<u>(21,000)</u>
Asset book value July 1, 2014	<u>\$23,000</u>
 Asset book value	 \$23,000
Proceeds from sale	<u>(20,000)</u>
Loss on sale	<u>\$ 3,000</u>

PROBLEM 10-3 (Continued)

- (c) The land would be transferred from an Investment account to a Land account within Property, Plant and Equipment. The transfer would be done at carrying value at the date of the transfer. The carrying value would usually be the cost base (unless there had been an impairment and write-down of the cost) or the fair value if the land was considered to be a qualifying investment property.**

PROBLEM 10-4

(a) 1.	Land (Schedule A)	181,100	
	Buildings – Structure (Schedule B)	116,250	
	Buildings – HVAC (Schedule B)	30,000	
	Insurance Expense (6 months X \$95)	570	
	Prepaid Insurance (16 months X \$95)	1,520	
	Organization Expense	610	
	Retained Earnings	43,800	
	Salaries and Wages Expense	32,100	
	Land and Building		405,950

Schedule A

Amount Consists of:

Acquisition Cost	
(fair value of land and building since share-based payment)	\$166,000
Removal of Old Building	9,800
Legal Fees (Examination of title)	1,300
Special Tax Assessment	4,000
Total	<u><u>\$181,100</u></u>

Schedule B

Buildings–Structure amount consists of:

Legal Fees (Construction contract)	\$ 1,860
Construction Costs (1 st payment)	60,000
Construction Costs (2 nd payment)	40,000
Insurance (2 months)	
([(\$2,280 , 24] = \$95 X 2 = \$190)	190
Plant Superintendent's Salary	4,200
Construction Costs (Final payment)	10,000
Total	<u><u>\$116,250</u></u>

PROBLEM 10-4 (Continued)

Buildings–HVAC amount consists of:

Plumbing, heating and air-conditioning systems	<u>\$30,000</u>

2. Land and Building	4,060	
Depreciation Expense		2,147
Accum. Depr.—Buildings – Structure		1,163
Accum. Depr.—Buildings – HVAC		750

Schedule C

Depreciation taken	\$ 4,060
Depreciation that should be taken for the Buildings – Structure (1.0% X \$116,250)*	(1,163)
Depreciation that should be taken for the Buildings – HVAC (2.5% X \$30,000)**	<u>(750)</u>
Depreciation adjustment	<u>\$ 2,147</u>

* useful life is 50 years, $1/50 \text{ years} = 2.0\%$
 $2.0\% \times 6/12 = 1.0\%$

** useful life is 20 years, $1/20 \text{ years} = 5\%$
 $5.0\% \times 6/12 = 2.5\%$

PROBLEM 10-5

(a)

**Kerr Corp.
Cost of Building
Conservative approach**

Fixed-price contract	\$1,300,000
Plans, specifications and blueprints	25,000
Architect's fees	82,000
Upgrading of windows	46,000
Internal direct labour and materials	67,000
Overhead based on direct labour hours	10,000
Less: Municipal government grant*	<u>(36,000)</u>
Cost of building	<u>\$1,494,000</u>

***Assumes the fixed fee contract is reduced by this amount .**

In this approach, conservative refers to expensing as many costs as possible rather than placing them on the balance sheet as part of the building's cost for future depreciation. The building costs included direct costs of construction as well as direct variable overhead. Fixed overhead (executive time of \$54,000) was expensed directly. GAAP generally requires fixed overhead to be expensed in the construction of PP&E, however, some exceptions do exist. Interest costs were also expensed directly. Current ASPE does not specify that interest costs on self-constructed assets must be capitalized but rather that the policy selected must be applied consistently and be disclosed.

This is different from the IFRS standards, where borrowing costs are more widely defined as "interest and other costs that an entity incurs in connection with the borrowing of funds" (ASPE limits capitalization to interest costs), and IFRS requires capitalization of borrowing costs of qualifying assets (ASPE allows a choice between capitalization and expensing).

PROBLEM 10-5 (Continued)

**(b) Kerr Corp.
Cost of Building
“Increased Income” approach**

Fixed-price contract	\$1,300,000
Plans, specifications and blueprints	25,000
Architect’s fees	82,000
Upgrading of windows	46,000
Internal direct labour and materials	67,000
Overhead based on direct labour hours	10,000
Allocated cost of executive time**	54,000
Interest cost on building construction	63,000
Interest cost on maintenance building constr.	3,200
Less: Municipal government grant*	<u>(36,000)</u>
Cost of Building	<u>\$1,614,200</u>

***Assumes the fixed fee contract is reduced by this amount.**

****In order to report increased income, the accountant would include certain expenditures in the cost of the building, rather than expensing them directly. For example, interest costs on self-construction of the building and maintenance building may be capitalized. Generally, only directly attributable costs are capitalized, and no fixed overhead is charged to a PP&E asset account. However, if there were fixed costs that could be considered directly attributable to construction, due to the increased activity, the capitalization of some fixed overhead costs is permitted. For example, if the executive in charge of construction had to hire an additional person to take on some other responsibilities usually carried out by the executive because so much of his or her time was taken up with construction, a case could be made to capitalize part of the executive’s cost. The calculations above assume a case can be made in this situation.**

PROBLEM 10-5 (Continued)

(c) For 2015	Conservative approach	Increased Income approach
Other expenses	<u>120,200</u> ⁽³⁾	
Total expenses related to building	<u>\$120,220</u>	<u>\$0</u>
 For subsequent years	 Conservative approach	 Increased Income approach
Depreciation expense	<u>\$37,350</u> ⁽¹⁾	<u>\$40,355</u> ⁽²⁾
Total expenses related to building	<u>\$37,350</u>	<u>\$40,355</u>

(1) $\$1,494,000 / 40 \text{ years} = \$37,350$

(2) $\$1,614,200 / 40 \text{ years} = \$40,355$

(3) Other expenses = $\$54,000 + \$63,000 + \$3,200 = \$120,200$

In 2015, the “conservative” approach results in lower income and lower assets because expenditures such as the allocation of the executive’s cost and the interest costs on self-construction of the building and maintenance building are expensed. In subsequent years however, higher income will result because of a lower depreciation expense.

In determining the amount to be capitalized, the company should consider comparability and consistency, as well as the need for financial information to be faithfully representative, objective, and neutral. The company’s need to report increased income for a bank loan is a temporary position when considering the selection of a suitable accounting policy. For consistency, the same policy will be applied to future construction projects, and this policy may not be to the company’s advantage in the future. Increased income may also result in increased taxable income and increased taxes payable (depending on income tax rules).

PROBLEM 10-5 (Continued)

The accountant should also consider the impact of capitalizing fixed overhead costs on the cost of products manufactured in the same year as the construction of the building. If assigning fixed overhead to the construction of the building results in lower than normal product costs due to lower production during construction, then a reasonable allocation of fixed costs may not be achieved.

Finally, the accountant may also want to be consistent with U.S. GAAP and IFRS where capitalization of interest is required. Consistency with U.S. GAAP and IFRS would be desirable if the company sells its shares on the U.S. or international stock markets or where the company is a subsidiary of an international company and consistency with the parent company's accounting policies is more efficient. Conformance to IFRS should also be considered if the company is considering going public in the future and will then be required to conform to IFRS.

PROBLEM 10-6

1.	Land	623,333	
	Buildings	311,667	
	Common Shares		900,000
	Cash		35,000

Allocation of broker's fee:

$$\$35,000 \times \frac{\$600,000}{\$900,000} = \$23,333 \quad \text{Land}$$

$$\$35,000 \times \frac{\$300,000}{\$900,000} = \$11,667 \quad \text{Warehouse}$$

2.	Equipment (\$15,450 + \$1,000 + \$1,500)	17,950	
	Notes Payable		8,450
	Cash (\$7,000 + \$1,000 + \$1,500)		9,500

$$\begin{aligned} \text{Asset cost} &= (\text{Present value of the annuity} + \text{down payment}) + \text{Installation} + \text{Rearrangement} \\ &= (\$5,000 \times 1.69005) + \$7,000 + \$1,000 + \$1,500 \\ &= \$15,450 + \$2,500 \\ &= \$17,950 \end{aligned}$$

Maintenance and Repairs Expense	500	
Cash		500

3.	Machinery*	50,000	
	Cash		50,000

* The original cost of the old motor and the related accumulated depreciation should be removed from the accounts as the asset has been retired and is no longer in use. As these amounts are not known, this entry has been omitted.

PROBLEM 10-6 (Continued)

4.	Land	35,995	
	Buildings	97,005*	
	Prepaid Expenses (\$1,000 X 3/12)	250	
	Prepaid Insurance	940	
	Cash		134,190

Calculation of purchase cost of land and building:

Purchase price	\$125,000
Unpaid property taxes for previous year	900
Current year taxes until date of purchase (\$1,000 X 9/12)	<u>750</u>
Total cost	<u>\$126,650</u>

$$\$126,650 \times \frac{\$27,000}{\$95,000} = \$35,995 \quad \text{Land}$$

$$\$126,650 \times \frac{\$68,000}{\$95,000} = \$90,655 \quad \text{Building}$$

*Calculation of cost of building:

Building cost	\$90,655
Reshingling roof	2,200
Hauling refuse	230
Cleaning outside walls	750
Painting inside walls	<u>3,170</u>
Total cost	<u>\$ 97,005</u>

5.	Maintenance and Repairs Expense	35,000	
	Cash		35,000

PROBLEM 10-6 (Continued)

6.	Depreciation Expense	750	
	Acc. Depn. – Equipment		750
	(\$15,000 X 10% X 6/12)		
	Equipment (New)	21,000	
	Acc. Depn. - Equipment		
	(\$15,000 X 60%) + \$750	9,750	
	Loss on Disposal of Equipment	4,250	
	Equipment (Old)		15,000
	Cash		20,000
7.	Maintenance and Repairs Expense	12,000	
	Cash		12,000

- b) #4: The previous owner's unpaid property taxes on the property for the previous year could also be included in the land account only, rather than allocated between land and building since unpaid municipal taxes consist of a lien on the land and not on the building.**

#5: The decision to capitalize or expense the amount depends on the interpretation of the nature of the repair of the plumbing system. If it is considered to increase the future service potential of the building it would be treated as a major overhaul. If it is considered to maintain the existing level of service of the building the amount would be expensed. Additional information would be required.

PROBLEM 10-7

(a)

1. **Chesley Corporation**

Cash		23,000	
Machinery (New)		69,000	
Accumulated Depreciation	–	50,000	
Machinery			
Loss on Disposal of Machinery		18,000*	
Machinery (Old)			160,000
*Calculation of loss:			
Book value		\$110,000	
Fair value		<u>(92,000)</u>	
Loss		<u>\$ 18,000</u>	

Secord Company

Machinery (New)		92,000	
Accumulated Depreciation	–	45,000	
Machinery			
Loss on Disposal of Machinery		6,000*	
Cash			23,000
Machinery (Old)			120,000
*Calculation of loss:			
Book value		\$ 75,000	
Fair value		<u>(69,000)</u>	
Loss		<u>\$ 6,000</u>	

2. **Chesley Corporation**

Machinery (New)*		92,000	
Accumulated Depreciation	–	50,000	
Machinery			
Loss on Disposal of Machinery		18,000	
Machinery (Old)			160,000
* the new machinery cannot be recorded at a cost higher than its fair value.			

PROBLEM 10-7 (Continued)

Bateman Company

Machinery (New)			76,000
Accumulated Depreciation	-		71,000
Machinery			
Machinery (Old)			147,000

*It is assumed the transaction lacks commercial substance.

3. Chesley Corporation

Machinery (New) *			100,000
Accumulated Depreciation	-		50,000
Machinery			
Loss on Disposal of Machinery			18,000
Machinery (Old)			160,000
Cash			8,000

* the new machinery cannot be recorded at a cost higher than its fair value.

Shripad Company

Machinery (New)			77,000
Accumulated Depreciation	-		75,000
Machinery			
Cash			8,000
Machinery (Old)			160,000

Since the amount of cash is not significant, it is assumed this is a non-monetary transaction that does not have commercial substance.

PROBLEM 10-7 (Continued)

4. Chesley Corporation

Machinery (New) (\$92,000 + \$93,000)	185,000	
Accumulated Depreciation - Machinery	50,000	
Loss on Disposal of Machinery	18,000	
Machinery (Old)		160,000
Cash		93,000

Ansong Corporation

Cash	93,000	
Inventory (Used)	92,000	
Sales Revenue		185,000
Cost of Goods Sold	130,000	
Inventory		130,000

- (b) For Transactions #1 and #4 with Secord and Ansong, no alternative situation would change the accounting for the transaction since they are monetary transactions.

For the accounting for Transaction #2 with Bateman to change, the situation would have to result in different cash flows over the course of the machine's life so as to cause the transaction to have commercial substance.

Chesley Corporation

Machinery (New)	92,000	
Accumulated Depreciation - Machinery	50,000	
Loss on Disposal of Machinery	18,000*	
Machinery (Old)		160,000
*Calculation of loss:		
Book value	\$110,000	
Fair value	<u>(92,000)</u>	
Loss	<u>\$ 18,000</u>	

PROBLEM 10-7 (Continued)

Bateman Company

Machinery (New)			92,000	
Accumulated Depreciation	-		71,000	
Machinery				
Gain on Disposal of Machinery				16,000
Machinery (Old)				147,000

Calculation of gain: Fair value	\$92,000
Book value	<u>(76,000)</u>
Gain	<u>\$16,000</u>

For Transaction #3 with Shripad, situations that could result in different cash flows over the course of the machine's life would cause the transaction to have commercial substance.

Chesley Corporation

Machinery (New)			100,000	
Accumulated Depreciation	-		50,000	
Machinery				
Loss on Disposal of Machinery			18,000	
Machinery (Old)				160,000
Cash				8,000

Shripad Company

Machinery (New)			92,000	
Accumulated Depreciation	-		75,000	
Machinery				
Cash			8,000	
Gain on Disposal of Machinery				15,000
Machinery (Old)				160,000

*Calculation of gain: Fair value	\$100,000
Book value	<u>(85,000)</u>
Gain	<u>\$15,000</u>

PROBLEM 10-8

(a)

Garrison Books

1.	Equipment (new)	198,000	
	Accumulated Depreciation	–	
	Equipment (Crane #6RT)	15,000	
	Accumulated Depreciation	–	
	Equipment (Crane #S79)	18,000	
	Loss on Disposal of Equipment	1,500*	
	Cash	17,500	
	Equipment (Crane #6RT)		130,000
	Equipment (Crane #S79)		120,000

***Calculation of Loss on Disposal:**

Fair value of Crane #6RT	\$128,000
Book value of Crane #6RT	<u>(115,000)</u>
Gain	<u>\$13,000</u>

Fair value of Crane # S79	\$87,500
Book value of Crane # S79	<u>(102,000)</u>
Loss	<u>\$14,500</u>

Net loss = \$14,500 – \$13,000 = \$1,500

Pisani Books

2.	Inventory (Used)	202,500	
	Sales Revenue		185,000
	Cash		17,500
	Cost of Goods Sold	165,000	
	Inventory		165,000

PROBLEM 10-8 (Continued)

(b)		<u>Garrison Books</u>	
1.	Equipment (New)		185,000*
	Accumulated Depreciation—		
	Equipment (Crane #6RT)		15,000
	Accumulated Depreciation—		
	Equipment (Crane #S79)		18,000
	Loss on Disposal of Equipment		14,500
	Cash		17,500
	Equipment (Crane #6RT)		130,000
	Equipment (Crane #S79)		120,000

*Carrying amount of the assets given up = \$217,000 [(\$130,000 – \$15,000) + (\$120,000 – \$18,000)]; however, the fair value of the asset plus cash acquired of \$202,500 (\$185,000 + \$17,500) is less than that amount. Therefore, a loss is recognized for the difference between carrying amount of the assets given up and fair value of the assets acquired.

		<u>Pisani Books</u>	
2.	Inventory (Used)		182,500
	Inventory		165,000
	Cash		17,500

Recognition of revenue should be deferred because the transaction is non-monetary and lacks commercial substance. The amount of cash involved is not significant.

PROBLEM 10-8 (Continued)

- (c) 1. For Garrison Construction: Method (b) where a larger loss is recognized is more conservative. However, the assessment of the transaction as lacking commercial substance should be reviewed carefully. Since Garrison's goal is to acquire a larger crane that is more useful for new contracts, it is questionable whether the smaller old cranes have the same value in use as the new crane and perform the same function, especially since two old cranes are exchanged for one new crane. The amount of cash being considered non-significant should also be examined carefully.**
- 2. For Pisani Manufacturing Co.: Method (b) where revenue is deferred is more conservative. It is questionable, however, whether the transaction lacks commercial substance in this case especially since two old cranes are exchanged for one new crane. Where the exchange involves relatively similar inventory items and the exchange takes place to facilitate a sale to an outside customer, the earnings process is not considered completed. This is not clearly evident in this problem. The final decision should be based on an analysis of the effect on future cash flows, the basis for determining commercial substance.**

The approach used for method (a) presents the culmination of the earnings process for both companies and is less conservative. Given the facts of the two older small cranes exchanged for one new larger crane, it is more persuasive that this transaction has commercial substance. The transaction would also represent the culmination of the earnings process for Pisani Manufacturing since the transaction is with a customer (Garrison) and not with another manufacturer. Note that each company could very well come to a different conclusion.

PROBLEM 10-9

(a)

July 1, 2014 required journal entries:

Buildings (Building #1)	400,000	
Buildings (Building #2)	210,000	
Machinery (Building #1)	75,000	
Machinery (Building #2)	45,000	
Common Shares		730,000

December 31, 2014 required journal entries:

Depreciation Expense	20,000	
 Acc. Depn. – Buildings (Building #1) ...		20,000
($\\$400,000 \div 10 \times 1/2$)		

Depreciation Expense	10,500	
 Acc. Depn. – Buildings (Building #2) ...		10,500
($\\$210,000 \div 10 \times 1/2$)		

Depreciation Expense	12,500	
 Acc. Depn. – Machinery (Building #1) ..		12,500
($\\$75,000 \div 3 \times 1/2$)		

Depreciation Expense	2,500	
 Acc. Depn. – Machinery (Building #2) ..		2,500
($\\$45,000 \div 9 \times 1/2$)		

Acc. Depn. – Buildings (Building #1)	20,000	
 Buildings (Building #1)		13,000
 Revaluation Surplus (OCI)		7,000

(revalue manufacturing plant – bldg. #1)

The Buildings (Building #1) account is now $\$400,000 - \$13,000 = \$387,000$, and the related accumulated depreciation is account is zero.

PROBLEM 10-9 (Continued)

Acc. Depn. – Buildings (Building #2)	10,500	
Revaluation Gain or Loss	21,500	
Buildings (Building #2)		32,000
(revalue storage warehouse – bldg. #2)		
The Buildings (Building #2) account is now \$210,000 - \$32,000 = \$178,000, and the related accumulated depreciation is account is zero.		

December 31, 2015 required journal entries:

Depreciation Expense.....	40,737	
Acc. Depn. – Buildings (Building #1) ...		40,737
(\$387,000 ÷ 9.5 years)		
Depreciation Expense.....	18,737	
Acc. Depn. – Buildings (Building #2) ...		18,737
(\$178,000 ÷ 9.5 years)		
Depreciation Expense.....	25,000	
Acc. Depn. – Machinery (Building #1)..		25,000
(\$75,000 ÷ 3)		
Depreciation Expense.....	5,000	
Acc. Depn. – Machinery (Building #2)..		5,000
(\$45,000 ÷ 9)		
Acc. Depn. – Buildings (Building #1)	40,737	
Revaluation Surplus (OCI)	6,263	
Buildings (Building #1)		47,000
(revalue manufacturing plant – bldg. #1)		
The asset account is now \$387,000 - \$47,000 = \$340,000, and the related accumulated depreciation is account is zero.		

PROBLEM 10-9 (Continued)

Acc. Depn. – Buildings (Building #2)	18,737	
Revaluation Gain or Loss		737
Buildings (Building #2)		18,000

(revalue storage warehouse – bldg. #2)

The asset account is now \$178,000 - \$18,000 = \$160,000, and the related accumulated depreciation is account is zero.

(b)

July 1, 2014 required journal entries:

Same as part (a).

December 31, 2014 required journal entries:

Depreciation Expense	20,000	
Acc. Depn. – Buildings (Building #1) ... (\$400,000 ÷ 10 x 1/2)		20,000

Depreciation Expense	10,500	
Acc. Depn. – Buildings (Building #2) ... (\$210,000 ÷ 10 x 1/2)		10,500

Acc. Depn. – Buildings (Building #1)	20,000	
Acc. Depn. – Buildings (Building #2)	10,500	
Revaluation Gain or Loss	14,500	
Buildings (Building #1)		13,000
Buildings (Building #2)		32,000

(revalue bldg. #1 and bldg. #2)

The Buildings (Building #1) asset account is now \$400,000 - \$13,000 = \$387,000, and the related accumulated depreciation is account is zero.

The Buildings (Building #2) asset account is now \$210,000 - \$32,000 = \$178,000, and the related accumulated depreciation is account is zero.

PROBLEM 10-9 (Continued)

December 31, 2015 required journal entries:

Depreciation Expense.....	40,737	
Acc. Depn. – Buildings (Building #1) ...		40,737
(\$387,000 ÷ 9.5 years)		

Depreciation Expense.....	18,737	
Acc. Depn. – Buildings (Building #2) ...		18,737
(\$178,000 ÷ 9.5 years)		

Acc. Depn. – Buildings (Building #1)	40,737	
Acc. Depn. – Buildings (Building #2)	18,737	
Revaluation Gain or Loss	5,526	
Buildings (Building #1)		47,000
Buildings (Building #2)		18,000
(revalue bldg. #1 and bldg. #2)		

The Buildings (Building #1) asset account is now \$387,000 - \$47,000 = \$340,000, and the related accumulated depreciation is account is zero.

The Buildings (Building #2) asset account is now \$178,000 - \$18,000 = \$160,000, and the related accumulated depreciation is account is zero.

PROBLEM 10-9 (Continued)

(c)

Where revaluations are made on an asset-by-asset basis:

Revaluation Gain or Loss \$21,500

Where revaluations are made on a class-by-class basis:

Revaluation Gain or Loss \$14,500

On a class-by-class basis (as recorded in part (b)), the revaluation write-downs are netted against the revaluation surpluses of other assets (in this case the \$7,000 revaluation surplus for the manufacturing plant (Building #1)). This is not a neutral treatment, as it tends to minimize the losses recorded on the income statement.

IAS 16 paragraphs 31-42 require that asset revaluation surpluses be recorded on an individual asset basis (reference is made to the revaluation of asset items, not asset classes as a group). This is consistent with the application of the LCNRV rule for inventory which must be applied on an item-by-item basis.

PROBLEM 10-10

(a) Asset Adjustment Method

December 31, 2014

Machine #1

Depreciation Expense	37,500	
Accumulated Depreciation –		
Machinery (Machine #1)		37,500*
*\$225,000 ÷ 6 years		

Accumulated Depreciation – Machinery		
(Machine #1)	75,000	
Machinery (Machine #1)		75,000*
*\$37,500 X 2 years		

The Machinery (Machine #1) account is now \$225,000 - \$75,000 = \$150,000, and the related Accumulated Depreciation account is zero.

Machinery (Machine #1)	40,000	
Revaluation Gain or Loss		37,500*
Revaluation Surplus (OCI)		2,500

*Recognized in income (up to the extent of revaluation loss previously recognized in income for the same asset).
The Machinery (Machine #1) account is now \$150,000 + \$40,000 = \$190,000

Machine #2

Depreciation Expense	46,316	
Accumulated Depreciation –		
Machinery (Machine #2)		46,316*
*\$440,000 ÷ 9.5 years		

PROBLEM 10-10 (Continued)

Accumulated Depreciation – Machinery

(Machine #2).....	92,632	
Machinery (Machine #2).....		92,632*

*\$46,316 X 2 years

The Machinery (Machine #2) account is now \$440,000 - \$92,632 = \$347,368, and the related Accumulated Depreciation account is zero.

Revaluation Surplus (OCI).....	12,500*	
Revaluation Gain or Loss	6,868	
Machinery (Machine #2).....		19,368

*Recognized in OCI (up to the extent of revaluation surplus previously recognized in OCI for the same asset).

The Machinery (Machine #2) account is now \$347,368 - \$19,368 = \$328,000

(b) Proportionate Method

December 31, 2014

Machine #1

Depreciation Expense.....	37,500	
Accumulated Depreciation – Machinery (Machine #1).....		37,500*

*\$225,000 ÷ 6 years

	Before revaluation		Proportional after revaluation
Machine #1	\$300,000	x 190/150	\$380,000
Accumulated depreciation	<u>150,000*</u>	x 190/150	<u>190,000</u>
Carrying amount	<u>\$150,000</u>	x 190/150	<u>\$190,000</u>
*\$75,000 + \$37,500 X 2			

PROBLEM 10-10 (Continued)

Machinery (Machine #1)	80,000	
Revaluation Gain or Loss		37,500
Revaluation Surplus (OCI)		2,500
Accumulated Depreciation – Machinery (Machine #1)		40,000

Machine #2

Depreciation Expense	46,316	
Accumulated Depreciation – Machinery (Machine #2)		46,316*
*\$440,000 ÷ 9.5 years		

	Before revaluation	X 328,000 / 347,368	Proportional after revaluation
Machine #1	\$555,789		\$524,800
Accumulated depreciation	<u>208,421*</u>		<u>196,800</u>
Carrying amount	<u>\$347,368</u>		<u>\$328,000</u>
*\$115,789 + \$46,316 X 2			

Accumulated Depreciation – Machinery (Machine #1)	11,621	
Revaluation Surplus (OCI)	12,500	
Revaluation Gain or Loss	6,868	
Machinery (Machine #2)		30,989

(c)

The effects on the 2014 statement of comprehensive income are the same under both the asset adjustment method and the proportionate method. Revaluation of machine #1 results in a Revaluation Gain or Loss of \$37,500, and a Revaluation Surplus (OCI) of \$2,500. Revaluation of machine #2 results in a decrease in Revaluation Surplus (OCI) to zero, and a Revaluation Gain or Loss of \$6,868.

PROBLEM 10-10 (Continued)

(d)

The effects on the December 31, 2014 statement of financial position are different under each method. Under the asset adjustment method, for each machine, the Machinery asset account balance is the fair value of the machine as at December 31, 2014, and the Accumulated Depreciation – Machinery account balance is zero. Under the proportionate method, for each machine, the Machinery asset account balance and the Accumulated Depreciation – Machinery account balance are proportionately adjusted to reflect the new carrying amount, which is equal to fair value of the machine as at December 31, 2014.

(e)

A potential investor would likely prefer that Camco uses the proportionate method to apply the revaluation method, because the proportionate method provides additional useful and relevant information. Presenting an adjusted balance in the accumulated depreciation account (versus presenting a zero balance in the accumulated depreciation account, as under the asset adjustment method) provides information about the relative age of the asset, and allows the potential investor to assess when assets may need to be replaced.

PROBLEM 10-11

(a) Fair value model

March 1, 2014

Investment Property.....	1,275,000	
Cash		1,275,000

December 31, 2014

Investment Property.....	47,000	
Gain in Value of Investment Property..		47,000
(\$1,322,000 - \$1,275,000)		

December 31, 2015

Loss in Value of Investment Property.....	67,000	
Investment Property.....		67,000
(\$1,255,000 - \$1,322,000)		

December 31, 2016

Loss in Value of Investment Property.....	32,000	
Investment Property.....		32,000
(\$1,223,000 - \$1,255,000)		

(b) Cost model

March 1, 2014

Buildings (Investment Property)	956,250	
Land	318,750	
Cash		1,275,000

December 31, 2014

Depreciation Expense.....	21,042	
Accumulated Depreciation –		
Buildings (Investment Property).....		21,042
(\$956,250 - \$325,000) / 25 = \$25,250 X 10/12		

PROBLEM 10-11 (Continued)

December 31, 2015

Depreciation Expense.....	25,250	
 Accumulated Depreciation –		
 Buildings (Investment Property).....		25,250

December 31, 2016

Depreciation Expense.....	25,250	
 Accumulated Depreciation –		
 Buildings (Investment Property).....		25,250

(c)

The effects on the 2014 statement of comprehensive income are different under both models. Under the fair value model, the adjustment to fair value each year is included in net income, resulting in recording of a significant gain in the year. Under the cost model, net income is affected by depreciation expense only, which is a constant amount each year with application of straight-line depreciation.

(d)

The effects on the 2014 statement of financial position are different under both models. Under the fair value model, the Investment Property is separately reported as an item of PP&E, and valued at fair value. Under the cost model, the land and building are included with PP&E; the land is valued at cost and the building is valued at cost less accumulated depreciation.

PROBLEM 10-11 (Continued)

(e)

The fair value model results in more relevant information on the statement of financial position, because the investment property is revalued to fair value every year. An investor may be better able to assess the current economic position of the company with this information. However, the fair value model increases the risk of error and bias in the financial statements, because the fair value model uses a fair value amount that is not necessarily supported by a transaction with commercial substance.

Fair value is defined as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”, and independent valuers and market-related evidence are used to the extent possible, but other methods may have to be used if necessary.

An investor in Jessi should be aware that the fair value amount that is applied in the fair value model requires a degree of professional judgement in calculation and application, and that the determination of fair value can have a material affect on the statement of financial position as well as the income statement.

The cost model results in more neutral information on the financial statements, because the property is valued at cost less accumulated depreciation – buildings (investment property).

PROBLEM 10-12

- (1) Any addition to plant assets is capitalized because a new asset has been created. This addition increases the service potential of the plant. The addition should be componentized into its major elements if the components are significant and make up a relatively significant portion of the addition's total cost, and/or have different useful lives or depreciation patterns.**
- (2) Expenditures that do not increase the service benefits of the asset are expensed. Painting costs are considered ordinary repairs because they maintain the existing condition of the asset or restore it to normal operating efficiency.**
- (3) The approach to follow is to remove the old carrying amount of the roof (remove both the original cost and the accumulated depreciation of the old roof and recognize the loss) and substitute the cost of the new roof. It is assumed that the expenditure increases the future service potential of the asset. The removal cost will increase the loss on the old roof. If eligible for capitalization, the roof should be accounted for separately from the other parts of the building if it has a different useful life or depreciation pattern.**

PROBLEM 10-12 (Continued)

- (4)** Conceptually, the approach is to remove the old carrying amount of the electrical system (remove both the original cost and the accumulated depreciation of the old electrical system). However, practically it is often difficult if not impossible to determine this amount. The accounting standard differs under ASPE and IFRS. In this case, under ASPE, one of two approaches is followed. One approach is to capitalize the replacement on the theory that sufficient depreciation was taken on the old system to reduce the carrying amount to almost zero. A second approach is to debit accumulated depreciation on the theory that the replacement extends the useful life of the asset and thereby recaptures some or all of the past depreciation. In our present situation, the problem specifically states that the useful life is not extended and therefore debiting Accumulated Depreciation is inappropriate. Thus, this expenditure should be added to the cost of the plant facility. A similar choice is not available under IFRS. IFRS indicates that the original cost should be estimated and removed from the asset account and the related accumulated depreciation account, and the new cost should be recognized.
- (5)** See discussion in (d) above. In this case, because the useful life of the asset has increased, under ASPE, a debit to Accumulated Depreciation would appear to be the most appropriate choice.

(6)

***PROBLEM 10-13**

(a)	<u>2014</u>	<u>2015</u>
Land (Schedule 1)	\$192,000	\$192,000
Buildings	34,875*	720,219 **
Interest expense	3,125	34,656
*\$30,000 (architectural fees) + \$3,000 (building permits) + \$1,875 (2014 capitalized interest)		
**\$34,875 (2014 capitalized building cost) + \$240,000 (Mar. 1) + \$360,000 (May 1) + \$60,000 (July 1) + \$25,344 (2015 capitalized interest)		

Schedule 1 - Balance in the Land Account

Purchase Price	\$184,000
Surveying Costs	2,000
Title Transfer Fees	4,000
Demolition Costs	3,000
Salvage	<u>(1,000)</u>
Total Land Cost	<u>\$192,000</u>

2014 - Calculations for Buildings – Capitalized Borrowing Costs:

Weighted Average Expenditures for 2014:

Date	Amount	Fraction	Weighted Expenditures
1-Dec	\$192,000	1/12	\$16,000
1-Dec	30,000	1/12	2,500
1-Dec	<u>3,000</u>	1/12	<u>250</u>
	<u>\$225,000</u>		<u>\$18,750</u>

*PROBLEM 10-13 (Continued)

Weighted Average Borrowings for 2014:

Date	Amount	Fraction	Weighted Expenditure	Interest Rate	Amount Capitalizable
1-Dec	\$600,000	1/12	\$50,000		
	but limited to		18,750	0.10	\$1,875
	Interest taken to Interest Expense				3,125
	(\$600,000 X 10% X 1/12 - \$1,875)				

Weighted Average Expenditures for 2015:

Date	Amount	Fraction	Weighted Expenditure
1-Jan	\$225,000	6/12	\$112,500
1-Jan	1,875	6/12	938
1-Mar	240,000	4/12	80,000
1-May	360,000	2/12	60,000
1-Jul	60,000	0/12	0
	<u>\$886,875</u>		<u>\$253,438</u>

Weighted Average Borrowings for 2015:

Date	Amount	Fraction	Weighted Borrowing	Interest Rate	Amount Capitalizable
1-Jan	\$600,000	6/12	\$300,000		
	but limited to		253,438	0.10	\$25,344
	Interest taken to Interest Expense				34,656
	(\$600,000 X 10% X 6/12 - \$25,344) +				
	(\$600,000 X 10% X 6/12)				

(b)	<u>2014</u>	<u>2015</u>
Land	\$192,000	\$192,000
Buildings	33,000*	693,000**
Interest expense	5,000	60,000
*\$30,000 (architectural fees) + \$3,000 (building permits)		
**\$33,000 (2014 capitalized building cost) + \$240,000 (Mar. 1) + \$360,000 (May 1) + \$60,000 (July 1)		

***PROBLEM 10-13 (Continued)**

(c)

If Inglewood pays for the construction with internally generated funds, Inglewood will incur an opportunity cost of using the funds for construction, and the company will forego the opportunity to invest the funds elsewhere. This opportunity cost would not be recorded in the financial statements. Compared to paying for the construction with internally generated funds, the borrowing of funds for construction and capitalization of borrowing costs will result in higher total assets in the periods beginning in the year of construction, higher debt, and higher depreciation expense in the periods after construction is complete.

***PROBLEM 10-14**

(a) Calculation of Weighted-Average Accumulated Expenditures

<u>Expenditures</u>					<u>Weighted-Average Accumulated Expenditures</u>
Date	Amount	X	Capitalization Period	=	
July 30/14	\$1,200,000		10/12		\$1,000,000
Jan. 30/15	1,500,000		4/12		500,000
May 30/15	<u>1,300,000</u>		0		<u>0</u>
	<u>\$4,000,000</u>				<u>\$1,500,000</u>

(b)

<u>Weighted-Average Accumulated Expenditures</u>	X	<u>Capitalization Rate</u>	=	<u>Avoidable interest</u>
\$1,500,000		13%*		<u>\$195,000</u>

Loans Outstanding During Construction Period:

	<u>Principal</u>	<u>Interest</u>
*14½% five-year note (12/12)	\$2,000,000	\$290,000
12% ten-year bond (12/12)	<u>3,000,000</u>	<u>360,000</u>
	<u>\$5,000,000</u>	<u>\$650,000</u>

$$\frac{\text{Total interest}}{\text{Total principal}} = \frac{\$650,000}{\$5,000,000} = 13\% \text{ (capitalization rate)}$$

(c) (1) and (2)

Total actual interest cost	<u>\$650,000</u>
Total interest capitalized	<u>\$195,000</u>
Total interest expensed	<u>\$455,000</u>

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

CA 10-1 REAL ESTATE INVESTMENT TRUST (RE)

Overview:

- Units listed on the stock exchange and therefore a GAAP (IFRS) constraint.
- Legal structure important since it has cash flow implications – must pay out substantially all of cash flows = distributable income (NI before special charges less capital replacement reserve). At the same time, bias to show stable and growing distributions - must be careful that reserves are not understated and income overstated due to cash flow implications. Note that although this is based on GAAP, it is not defined by GAAP so there may be some room for additional bias.
- Role – as auditor – is to ensure transparency and full disclosure.
- Assets consist primarily of property, plant, and equipment (\$1.7 out of \$1.9 billion total assets); therefore, accounting policies very important.
-

CA 10-1 (Continued)

Analysis and Recommendations:

Issue: measurement of capital assets

At amortized cost	At fair value
- Historically valued at amortized cost. - There has been no change in the business. - More objective and no additional costs to continually revalue. - Revaluation can be subjective and difficult to substantiate and therefore audit. - Other.	- Under IFRS, the entity has the option to use fair value under the revaluation model (gains and losses generally go to OCI unless impairment). - In addition if these are investment properties, they may be valued at fair value with gains and losses booked through income. Care must be taken to analyze whether the hotels are investment properties or not as per IAS 40. For instance, if RE operates the hotels themselves for profit, they would not qualify as investment properties. If however, they hold the hotels just as investments, they would qualify for this treatment. - This accounting policy choice would affect net income and therefore distributable income. - Using fair value is more relevant as it shows a better economic value of the properties. In terms of maintaining capital, it is important that the entity not pay out too much in distributions. - However, there would be a greater cost associated with revaluing the assets each reporting period and it would also introduce volatility. Note that if the properties are investment properties, fair values must be reported whether or not the Trust recognizes the fair values in the accounts. - Other.

Conclusion: either is acceptable.

IC 10-1 ATLANTIC EXPLORATION LIMITED (AEL)

Note that this case is adapted from a CICA case. The solution has been changed and updated.

Overview

Stakeholders needs and biases:

- Group of 10 – will want info regarding their investment. Iskra/Collin will want the statements to reflect positively on themselves (and the business decisions that they have made)
- New investors or buyers of the treasure – will want to determine if good investment (AEL looking to raise \$1.5 million). Bias to make the statements look good in order to attract new financing.
- Bank will want to assess ability to repay old loans. Bias to show the bank that they are able to repay.
- Government will want to determine royalty on treasure found and will need fair value information. Note that the higher the fair value, the higher the royalties. There may be a bias to value the treasure more conservatively. Government will also want to assess viability to determine whether to give more grants.
- Iskra and Colin will use the statements for feedback on how company is doing (whether profitable and sufficient cash flows).
- other

GAAP likely a constraint since users want info that is relevant and reliable. The company will have to decide whether to use ASPE or IFRS. The analysis incorporates choices under ASPE as well as IFRS. Where there is a difference, it is noted.

Business/industry – start-up co – in need of capital – also capital intensive – significant costs in exploration – potential for large gains – f/s will not have predictive value at this stage. May want to include additional notes that explain the nature of the business and what stage it is in (e.g. exploration stages for the treasure hunting part)

Role – CA therefore more conservative especially given risky nature of business.

IC 10-1 (Continued)

Analysis and recommendations

1. Revenue recognition – salvage operations

% completion method	Completed K	Zero profit method
- Continuous earnings process made up of many significant events including locating the item, determining whether likely to be able to retrieve and then retrieval - More closely reflects work actually performed - Improves results – revenues recognized earlier - Earlier recognition fine since recovered vessel remains in possession of company until all amounts paid – only uncertainty is if item not recovered - Could use past history to assess likelihood of recoverability - Collectibility not an issue for first two payments since paid before the end of the contract - Allowed under both GAAPs - This is the most significant part of the operations currently so will want the statements to reflect this and profitability of this part of the operations - Other	- Difficult to measure % complete - May not ever find/recover the item - Very conservative and does not reflect the activities being performed – although does reflect the risky nature of the business - Only allowed under ASPE - Other	- Under IFRS may use % of completion or zero profit method - If outcome not determinable, recognize recoverable revenues up to costs (and thus zero profits) - Since the last payment is not recoverable unless the items are salvaged, this might be the preferred accounting policy - This would have the impact of recognizing zero profits in the early stages of the contract and would therefore be more conservative and more transparent since it reflects the riskiness associated with salvage operations - Other

IC 10-1 (Continued)

Recommend and why – any of the above options are acceptable although must decide whether following ASPE or IFRS first.

2. Revenue recognition – treasure

Early recognition – when found/retrieved	No recognition until sold
- Research show significant sunken vessels - Have permits to investigate area - Discovery made – based on sample – able to measure within range - Several interested buyers - Therefore meets definition of asset (future benefits will accrue through sale of item) - Government will be interested in value in order to predict royalty payment - May be able to argue under either GAAP although more aggressive	- Measurement an issue – difficult to value - Do not yet have buyer – not sure if buyer/market due to unique nature - Collectibility an issue given no buyer - Must book 1% royalty at same time - Other

Recommend and why - any of the above options are acceptable although must decide whether following ASPE or IFRS first.

3. Exploration costs

IC 10-1 (Continued)

Expense	Capitalize
- Like mining companies – large level of uncertainty as to future benefits/large amounts required upfront - Uncertainty as to future benefits – will they be able to find, retrieve and then sell for more than costs? - Difficult to determine value of treasure and whether can recover from water and/or find a buyer (unique items – not necessarily any market) - May not be able to raise funds to bring treasure to surface - Expensing may be more transparent – reflecting risk – may want to segregate different types of operations on the statements so that these costs do not eliminate the profit on the salvage operations - Other	- Capitalize since part of the costs directly incurred to find treasure - Treasure by definition has value and is (hopefully) saleable - Have already found some treasure and so costs are recoverable - Must prove that meets definition of asset (future benefits and control/access). Note that they may be able to argue future benefit since have buyers and may argue control/access since have permits and have expertise from salvage operations - Will have to ensure that all costs deferred are recoverable - Other

Recommend and why - any of the above options are acceptable although must decide whether following ASPE or IFRS first.

4. Grants

- Accrue if expect to meet government payout criteria
- Offset wages/exploration costs

Recommend and why.

IC 10-2 OG LIMITED (OG)

Overview

- Exploration and development company with several wells in production – very capital intensive
- Shares trade on LSE therefore public and IFRS a constraint
- There may be a company bias to make company look better given stock options
- As auditor – ensure transparency

Analysis and recommendations

Costs to cap well

Capitalize	Expense
- Argue that recent expenditures make well safer and add value	- Not really extending life of wells – just restoring to original estimated life - Part of ordinary risks of business – therefore ongoing ordinary cost of doing business - Numerous failed attempts likely do not add economic value – sunk costs

Recommend and why – likely more conservative to expense as this is an ordinary risk of doing business.

Cleanup costs?

Accrue liability	Disclose only
- Estimate of \$5 – 10 million therefore measurable – use expected value - Constructive obligation since have announced that will set everything straight - More transparent	- Difficult to measure with any meaningful accuracy

Recommend and why – likely accrue since appears to be measurable and likely.

Lawsuit

Accrue liability	Disclose only
- Lawyers estimate 10% - may use expected value to measure - Constructive obligation exists as noted above - More transparent	- Difficult to measure – being sued for 10X the value that lawyers estimate for settlement

Recommend and why - likely accrue since appears to be measurable and likely.

IC 10-2 (Continued)

Costs to find wells

Capitalize	Expense
- All costs to find wells – even dry holes – are necessary in order to find the productive wells – all incurred to get asset ready for use - These are all direct costs as could not find the productive wells without digging and searching - More transparent as show true cost of running the business	- Dry wells do not meet the definition of an asset – no future benefit

Recommend and why – consider expensing since better reflects ongoing costs of doing business.

How to value gold

At NRV	At cost
- A market exists for gold so easy to measure - Recognize gains earlier as the significant event is bring the gold up out of the ground – a customer always exists	- May be difficult to measure when in the ground since do not know how much is there - Even when brought up – no customer yet and gold not yet delivered

Recommend and why – likely leave at cost since better to wait until customer identified.

Other

- Is well impaired given problems? How to measure
- Should an ARO be recognized given company's assertion that it will make efforts to restore site = constructive obligation
- If ARO recognized – how to measure?

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 10-1 (Time 40-45 minutes)

Purpose—to provide the student with the opportunity to discuss how costs related to the purchase of a building should be reported under PE-GAAP and IFRS and the case highlights differences between the accounting treatments. The situation requires the student to discuss the treatment of net revenue received during renovations and then the cost of the building itself and whether different components should be recorded.

WA 10-2 (Time 20-25 minutes)

Purpose—to provide the student with a situation involving the proper allocation of costs to self-constructed machinery. As part of this case, the student is required to discuss the propriety of including overhead costs in the construction costs. Finally, the proper accounting treatment accorded the development costs associated with the construction of a new machine must be evaluated.

WA 10-3 (Time 20-25 minutes)

Purpose—this assignment provides the student with a situation relating to government assistance in the form of a forgivable loan related to asset construction and a government grant related to operating costs.

WA 10-4 (Time 25-30 minutes)

Purpose—to provide the student with a context in which to examine differences in accounting for exchanges of assets in a non-monetary transaction.

WA 10-5 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the proper accounting treatment involving incidental costs associated with the purchase of a machine. The student must be able to defend why certain costs might be capitalized even though this valuation has no relationship to net realizable value. In addition, the costs may be charged off immediately for tax purposes and the student is required to analyze why these costs may still be capitalized for book purposes.

THE TIME AND PURPOSE OF WRITING ASSIGNMENTS (CONTINUED)

WA 10-6 (Time 20 – 25 minutes)

Purpose—this writing assignment provides an opportunity to reinforce the major differences between IFRS and private enterprise accounting standards, and to relate the differences to the conceptual framework.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 10-1

There are several issues to be discussed in this question including: the storage revenue earned during renovations, the cost of the elevator inspection and whether the building costs need to be allocated to different components.

(i) ASPE

Under private company GAAP, the net storage revenue, which was incurred during the renovation period prior to when the asset was substantially completed and put into use, will be deducted from the cost of the building.

The cost of the elevator inspection is part of the cost of getting ready the asset for use, and therefore would initially be capitalized.

Although ASPE suggests that the building could be separated into different components, this is only required when practicable and also is not standard practice. Given this it would likely not be required to separate the cost of the building into its components and all costs would be capitalized to a single account - building.

However, should the elevator inspection, which we can specifically identify, be a separate account and depreciated over 5 years, or become part of the building? ASPE does not specifically refer to inspection costs. In practice, the ongoing inspections every five years would likely be treated as maintenance expenses since it could be argued that these costs were not a betterment that extended the life of the asset – it was simply part of the ongoing maintenance required.

Assuming that all costs are capitalized to building, the building would have an initial cost of:

$$\$5,000,000 + \$2,000,000 + \$150,000 - \$100,000 = \$7,050,000$$

For subsequent years, the company will continue to depreciate the costs. The assets will be measured at cost less accumulated depreciation and accumulated impairment losses.

(ii) IFRS

IFRS has different requirements with respect to the incidental storage revenue. Since the net storage revenue was not required to get the asset ready for its

WA 10-1 (Continued)

intended use, it would be recorded as income in the current year and not be recorded against the cost of the building.

Inspection costs are also specifically identified by IFRS. The inspection costs would be capitalized to a separate account – Elevator Inspection – and would be depreciated over five years. At the end of five years, the asset account and its related accumulated depreciation account would be removed, and the new inspection costs capitalized and amortized over the period until the next inspection.

IFRS requires that parts of the building that are significant and have different useful lives should be separately reported as components. The roof and heating and air conditioning are significant to the cost of the building and will have to be reported separately. The roof will be capitalized at \$500,000 and depreciated over 7 years, and the heating and air conditioning system will be capitalized at \$750,000 and depreciated over 10 years. Highstreet should ensure there are not any other parts that will depreciate over fewer than 30 years that should be separately recorded. The building will be depreciated over 30 years.

Given the above, Highstreet will have the following accounts:

Storage revenue \$100,000

Elevator inspection (a PP&E asset) \$150,000

Roof (a PP&E asset) \$500,000

Heating and air conditioning system (a PP&E asset) \$750,000

Building (a PP&E asset) $\$5,000,000 + 2,000,000 - \$500,000 - \$750,000 = \$5,750,000$

For subsequent years, Highstreet has a choice of using the cost model or the revaluation model if fair values can be reasonably determined. If the cost model is chosen, the company will continue to depreciate the assets each year, similar to ASPE, and the assets will be measured at cost less accumulated depreciation and accumulated impairment losses.

If the revaluation model is used, then the assets will be carried at their fair values at the date of revaluation less any subsequent accumulated depreciation and impairment losses. Depending on how rapidly the fair values of the assets change, their fair values may not need to be determined annually (perhaps only every three years at the most), as long as the reported amounts are not materially different from their fair values. Finally, another requirement is that the revaluation model is used for the entire class of assets – so Highstreet needs to ensure that this would be applicable.

If the revaluation model is used, then revaluation surpluses arising will be credited to OCI unless previous revaluation losses have been recorded, in which

WA 10-1 (Continued)

case, the surplus will be credited to income to the extent of these losses. Similarly, revaluation losses will initially be debited against any revaluation surpluses in OCI, and then any difference to net income for the year.

WA 10-2

Note: the solution will be the same regardless if the company is a private entity or a publicly accountable enterprise.

- (a) Materials and direct labour used in the construction of the equipment definitely should be charged to the equipment account. It should be emphasized that no gain on self-construction should be recorded because such an approach violates the historical cost principle. Technically, only *directly attributable* costs can be capitalized as part of the asset. The controversy centres on the assignment of indirect costs, called overhead or burden, consisting of power, heat, light, insurance, property taxes on factory buildings, etc. The suggested approaches are discussed below.
- (b) 1. Many believe that only the variable overhead costs that increase as a result of the construction should be assigned to the cost of the asset as these can be shown to be directly attributable to the construction of the asset. This approach assumes that the company will have the same fixed costs regardless of whether the company constructs the asset or not, so it is difficult to argue that these types of costs are directly attributable to the asset construction. An argument could be made that the additional fixed costs incurred for the part of the building solely devoted to asset construction are directly attributable to this construction and should be added to the costs of the assets. In other words, if the assets were not being constructed, these costs would not be incurred. Therefore, only the incremental costs between assets not being constructed and assets being constructed should be charged.
2. Proponents of alternative (2) argue that such assets should be given the same treatment as inventory items and that all costs should be allocated thereto just as if saleable goods were being produced. They state that no special treatment should be granted in the allocation of any cost, as long as sufficient facts are available to enable the allocation to be made. They argue that allocation of overhead to fixed assets is similar to the allocation to joint products and by-products, and should be made at regular rates. Of course, no item should be capitalized at an amount greater than that prevailing in the market. Although a portion of fixed costs can be allocated as part of inventory production, this is not the case with property, plant and equipment, where the accounting rules are clear and only directly attributable costs can be allocated.
- (c) Because costs of development are usually higher on the first few units, the additional costs of \$273,000 should be allocated to all four machines. If these costs are due to inefficiency, abnormal wastage or excessive costs and not development costs, the additional costs should be expensed. Again,

WA 10-2 (Continued)

it is important that the total costs allocated not exceed the fair value in the market place.

WA 10-3

Note: The solution below is valid for companies following either ASPE or IFRS.
The accounting treatment is the same under both standards.

Memo to: Hotel Resort Limited Board of Directors

Subject: Government Forgivable Loan and Grant

There are two types of government assistance that the federal government has agreed to provide the company. We will discuss each of these amounts separately, since the accounting treatment will be different.

Construction Loan

There are two alternatives for recording this loan – the cost reduction approach and the deferral method approach assuming that the loan will be forgiven.

The cost reduction method would record the \$50 million against the cost of the facility construction upon receipt. This would result in a net asset cost of \$650 million (\$700 million - \$50 million), which would then be depreciated over the useful life of the asset.

This would result in less depreciation being recorded each year, when compared to an asset constructed with no government funding. This has the effect of reducing total assets, reducing operating expenses, and increasing net income over the life of the asset.

The deferral method would record the \$50 million as deferred revenue on the Statement of Financial Position. This deferred revenue would be amortized to income over the life of the asset, thereby also increasing net income over the life of the asset. The related asset would be recorded at \$700 million and depreciated over its useful life. In this case, the amortization of the deferred revenue could either be recorded as a reduction of the depreciation expense or as a separate component of income.

Both methods result in the same amount of net income. The differences relate to the presentation on the balance sheet.

The related note disclosure for the cost reduction method would be as follows:

The federal government of Canada has granted financial assistance in the form of forgivable loans for the construction of a tourist facility in Yellowknife. Loans totalling \$50 million have been advanced and will be forgiven provided the full amount is used to construct the facility, and the resort is in operation for fifteen years and is not sold within this time period. The company has recorded the government assistance as a reduction of the capital cost of the resort facilities.

WA 10-3 (Continued)

If the grant is recorded as deferred revenue, the note would read as follows:

The federal government of Canada has granted financial assistance in the form of forgivable loans for the construction of a tourist facility in Yellowknife. Loans totalling \$50 million have been advanced and will be forgiven provided the full amount is used to construct the facility, and the resort is in operation for fifteen years and is not sold within this time period. The company has recorded the government assistance as deferred revenue and amortizes the amount to income over the useful life of the related resort asset.

This forgivable loan will be accounted for as government assistance, provided that the company intends to comply with the terms and conditions for forgiveness. At each reporting date, the company will have to assess whether or not these terms can still be met. In the event that the amount will come due, if the terms cannot be met, a liability will be required to be set up with a related expense to income at that time.

The second type of grant assistance is the funding to cover the operational costs related to payroll costs for 50 summer students to work for four months and their related room and board costs. This funding should be recorded against the related expenses or as income in the income statement at the time it becomes receivable. As a result, it will increase the net income for each year.

The related note disclosure would be:

The federal government of Canada has granted financial assistance in the form of an annual government grant to cover 70% of the payroll and room and board costs for fifty summer students. The company is required to hire and pay these students for four months on a full time basis. During the year the company received \$\$\$ which has been recorded as a reduction of the related payroll and accommodation costs for these students.

WA 10-4

Note: The solution below would be applicable to the company following either ASPE or IFRS.

With the cash equalling 10.5% of the total value of this transaction, it is not obvious that this is a non-monetary transaction. Because the \$10,000 may not be considered a significant amount, both companies should determine whether the transaction has commercial substance by looking at changes in future cash flows as well. Because of the change in business strategy, the exchange of assets between Ames and Jung is likely to have **commercial substance** for both parties. This is to say that the risk, timing and amount of future cash flows to each party will be substantially different subsequent to the exchange of assets.

The transaction is therefore **accounted for at fair value** which means that the cost of the asset acquired is equal to the fair value of the assets given up (or fair value of the assets received if more reliable). We are told that both of the fair value amounts are reliable.

Ames Construction would recognize the new asset at the fair value of the assets given up – in this case cash of \$10,000 and the equipment of \$85,000 for a total of \$95,000. Given the net book value of the asset is \$60,000, this will result in a gain of \$25,000.

Jung Construction would recognize the new asset at the fair value of the assets given up less any cash received – in this case the fair value of the equipment given up is \$95,000 less cash received of \$10,000 results in the new asset being reported at \$85,000. Given the net book value of the asset is \$70,000, this will result in a gain of \$25,000.

Memo to the Accountant:

TO: The Controller, Ames Construction.

RE: Asset Exchanges

This is essentially a non-monetary transaction as the amount of cash paid represents only about 10% of the fair value of the exchanged assets. Where there is commercial substance and fair values can be reliably measured for the assets given up, a non-monetary transaction is accounted for using the fair value approach, which means that the new asset acquired is recorded at the fair value of the assets given up in the transaction. In this case, since the cash flows that will be generated from the old asset given up are different from the cash flows generated by the new asset received, there is commercial substance to this

WA 10-4 (Continued)

transaction. Secondly, since the fair value of the equipment given up can be reliably measured, this is the amount used to determine the value of the asset received.

The income statement will reflect a before tax gain of \$25,000. This gain will increase the reported income on this year's financial statements. Future income statements will probably show a higher depreciation expense because of an increased book value of the new asset. Thus future income statements may reflect lower net income, if there is no increase (or the increase is less than the additional depreciation expense) in net income arising from the new assets.

The following entry is required in the books:

Machinery	95,000	
Accumulated Depreciation	40,000	
Cash		10,000
Gain on Disposal of Machinery		25,000
Machinery		100,000

WA 10-4 (Continued)

Memo to the Accountant:

TO: The Controller, Jung Construction

RE: Exchanges of Assets

This is essentially a non-monetary transaction as the amount of cash paid is approximately 10% of the fair value of the exchanged assets. Where there is commercial substance and fair values can be reliably measured for the assets given up, a non-monetary transaction is accounted for using the fair value approach, which means that the new asset acquired is recorded at the fair value of the assets given up in the transaction. In this case, since the cash flows that will be generated from the old asset given up are different from the cash flows generated by the new asset received, there is commercial substance to this transaction. Secondly, since the fair value of the equipment given up can be reliably measured, this is the amount used to determine the value of the asset received.

The income statement will reflect a before tax gain of \$25,000. This gain will increase the reported income on this year's financial statements. Future income statements will probably show a higher depreciation expense because of an increased book value of the new asset.

The entry required on the books is as follows:

Machinery	85,000	
Accumulated Depreciation	80,000	
Cash	10,000	
Machinery		150,000
Gain on Disposal of Machinery		25,000

WA 10-5

Memo to: Owner-manager

Subject: Accounting for various Machinery costs

The \$7,500 costs to get the asset in place and ready for use should be capitalized as part of the cost of the machine. This is justified because the primary purpose in accounting for plant asset costs is to secure an equitable allocation of incurred costs over the period of time when the benefits are being received from the use of the assets. These costs—both the \$40,000 and the \$7,500—are much like prepaid expenses, to be matched against the revenue emerging through their use. The purpose of accounting for plant assets is to include all the costs required to get the asset ready for use, and proper determination of the cost of using this asset over its useful life.

It may be true that these installation costs could not be recovered if the machine were to be sold. This is not important, however, because presumably the machine was acquired to be used, not to be sold. Assuming approximately equal utilization of the machine in each of the ten years, the owner properly could allocate \$4,750 (10% of \$47,500) against each year's operations as depreciation. If the expensing suggestion were followed, the first year would be charged with \$11,500 (\$7,500 plus 10% of \$40,000), and the following nine years with \$4,000 per year, hence overstating expenses by \$6,750 the first year and understating expenses by \$750 per year for the succeeding nine years. This could hardly be defended as proper matching of costs and revenue.

Again, the purpose of accounting for plant assets is not to arrive at an approximation of current value of the assets each year over the life of the assets. However, even if this were an objective, the question of which method would come closer to stating current market value at some later date would revolve around the general trend of the price level over the years involved.

With respect to tax deductibility of these expenses: Two factors are involved here. First, the \$7,500 is not a proper deduction under federal income tax regulations. If it were deducted in the year of acquisition, and a correction were made in a later year on review of the return, additional tax plus interest and penalties would have to be paid. In the second place, even if the \$7,500 could properly be deducted, there would be no total tax saving over the years unless the tax rates applicable to the business were reduced during the following years. There is some value to taking the \$7,500 deduction right now because of the time value of money. If the rates increased, there would be an increase in total taxes, due to higher rates applicable during the period when amortization deductions would be reduced. However, generally accepted accounting principles are not determined by income tax effects. In many instances, private entity ASPE requires different accounting treatment for an item than the Income Tax Act does.

WA10-6

Generally, ASPE has been designed to reduce complexity in the recognition and measurement of property plant and equipment by reducing the number of choices on accounting policies that can be used to measure the assets at the time of acquisition and subsequent reporting periods. Additionally, ASPE has tended to adhere to methods generally accepted in practice in Canada, before conversion to IFRS, if there was no sound reason to change the practice.

The major differences between ASPE and IFRS are as follows:

- Under ASPE, HB 3061 for property, plant and equipment includes mining and oil and gas properties and investment properties. IFRS has three different standards to deal with these three types of properties.
- Generally, although ASPE indicates that costs of large assets should be allocated into separable components if practicable, in practice, this has not been the case. Under IFRS, when parts of the asset depreciate at different rates, components should be identified, and there is no mention of practicability. This of course, leads to much more complex record keeping for PP&E reported using IFRS.
- The types of costs that are included at the time of acquisition of the assets are different under PE GAAP and IFRS. Historically, in Canada and now under ASPE, net revenue earned from using the item of PP&E prior to completion of the asset is included in the cost of the asset. This is not the case under IFRS, which requires these types of net revenues/costs be taken into income.
- Acquisition costs are capitalized until the asset is substantially complete and ready for productive use under ASPE. These guidelines tend to be less rigid than the timing required by IFRS. Similarly, interest costs may or may not be capitalized for private enterprises during the construction process. IFRS does not allow a choice, and mandates that interest be capitalized based on pre-defined formulas.
- The inclusion of not only legal but constructive asset retirement obligations makes IFRS reporting more complex, in trying to identify all of the potential obligations a company might have. Under ASPE, these liabilities are limited to legal obligations which are defined by specific contracts.

WA 10-6 (Continued)

- In reporting periods subsequent to acquisition, only the cost model can be used under ASPE. Under IFRS, there are choices of the cost model or revaluation model for PP&E, or the cost model or fair value model for investment properties. Determining fair values can be time-consuming, expensive and require a sophisticated level of knowledge that some private enterprises may not be able or want to afford.
- Lastly, the accounting policies around betterments and replacement of PP&E are more difficult under IFRS than ASPE. IFRS requires that the replaced part be removed when capitalizing a replacement part or asset. Under ASPE, if the carrying cost of the replaced part is not known, then the company may charge the replacement cost to the asset, the accumulated depreciation or charge to an expense. This method reduces the amount of data that must be tracked for the assets in order to prepare the accounting entries and calculations on recognizing replacements or betterments.

RESEARCH AND FINANCIAL ANALYSIS

RA 10-1 Magna International Inc.

- a) Magna International designs, develops and manufactures automotive systems, modules, assemblies and components. They also engineer and assemble vehicles for sale to original equipment manufacturers of cars and light trucks in North America, Europe, Asia, Africa, and South America.
- b) Magna reports tangible capital assets of Land, Buildings, Machinery and equipment, and Construction in progress. This can be seen in Note #10 of the Financial Statements. These assets totaled \$4,236 million in 2011 which represents 29% of total assets. In 2010, the tangible capital assets made up 27% of total assets.
- c) As per the Significant Accounting Policy Note 1, long-lived assets are recorded at historical cost. These assets are tested for recoverability whenever indicators of impairment exist. If carrying value exceeds the estimated undiscounted cash flows from use, the asset is written down to fair value. Fair value is defined as the estimated discounted cash flows. The Company uses the straight-line basis to amortize its fixed assets.

Also, asset retirement obligation costs are capitalized as part of property, plant and equipment. Further, government grants related to capital expenditures are deducted from the cost of such assets.

- d) The Company paid \$1,236 million for fixed assets in 2011 and \$746 million in 2010 which has come from the positive cash flows realized from operating activities.
- e) Government assistance related to capital assets are recorded using the cost reduction method whereby the amount of the grant is shown as a reduction of the cost of the asset. Grants related to operating expenses are recorded as a reduction against the expense. Government loans that must be repaid are recorded as liabilities.

RA10-2 STORA ENSO OYJ

- (a) Stora Enso is a renewable materials innovator in the global biomaterials, paper, packaging and wood products industry.
- (b) Note 1 – Biological assets – states that the standing trees are considered biological assets under IFRS. These assets are valued at fair value less estimated point of sale costs at time of harvest. When little biological transformation has taken place, then fair value is deemed to be the original cost.
- (c) From Note 14, we can determine that the amount of the biological assets was EUR 212.6 million for 2011 and EUR 190.5 for 2010. Changes during 2011 related to :
- increase due to foreign currency translation - EUR 10 million
 - increase due to additions - EUR 17.2 million
 - decrease due to harvesting – EUR 5.1 million
- (d) Note 1 outlines the valuation method used. Fair value is determined using the discounted cash flow model assuming sustainable continuing operations and estimating for growth potential for one cycle. The yearly harvest rates are estimated based on growth rates and multiplied by the actual wood prices. Costs for harvesting and fertilizer are deducted in order to determine annual cash flows. These forecasted cash flows are then discounted to present value. Note 2 – Critical Accounting Estimates and Judgements, outlines in more detail the types of estimates required including growth, harvest, selling prices and costs. In addition, the company must make regular surveys of the forests to determine current growth rates and the volume of timber available.
- (e) The Consolidated Income Statement indicates that the company had a loss due to valuation of the biological assets of EUR 5.1 million for 2011, and had a loss in 2010 of EUR 4.0 million.

RA10-3 EMPIRE COMPANY LIMITED AND LOBLAW COMPANIES LIMITED

(a) Property plant and equipment (net of accumulated amortization):

Loblaw Companies at December 31, 2011	\$8,725.0 million
Empire Company at May 5, 2012	\$2,679.2 million

Percent of total assets:

Loblaw Companies	50.1%
Empire Company	38.8%

(b)

1. Fixed asset turnover:

Loblaw		Empire	
$\frac{\$31,250}{\$8,725 + 8,377}$	$= 3.65$	$\frac{\$16,249.1}{\$2,679.2 + 2,398.1}$	$= 6.40$
2		2	

2. Total asset turnover:

Loblaw		Empire	
$\frac{\$31,250}{\$17,428 + 16,841}$	$= 1.82$	$\frac{\$16,249.1}{\$6,913.1 + 6,518.6}$	$= 2.42$
2		2	

3. Profit margin:

Loblaw		Empire	
$\frac{\$769}{\$31,250}$	$= 2.46\%$	$\frac{\$352.1}{\$16,249.1}$	$= 2.17\%$

RA10-3 (Continued)

(c) Rate of return on total assets:

Loblaws		Empire	
$\frac{\$769}{\$17,428 + \$16,841}$	= 4.49%	$\frac{\$352.1}{\$6,913.1 + \$6,518.6}$	= 5.24%
$\frac{2}{2}$		$\frac{2}{2}$	

The profit margins for the two companies are similar, with Loblaw's having a slightly higher margin. The return on assets is higher for Empire than Loblaw's, indicating that Empire makes more profitable use of their assets than Loblaw's.

- (d) Empire uses both its total assets and its fixed assets more effectively in generating sales as indicated by its total asset turnover and fixed asset turnover ratios, both of which are higher than Loblaw's.
- (e) No, there are no apparent differences in accounting policies which might explain the differences in fixed asset turnover. Both companies capitalize interest and they use similar methods and terms for depreciation.
- (f) Note 24 from Loblaw's report indicates that the company has operating leases with future minimum lease payments totaling \$1,179 million over the life of the leases. Note 25 of Empire's report indicates that the company has operating leases with third parties totaling \$2,775.7 (add each of the 5 years plus the thereafter to arrive at the total lease payments required) and with related parties totaling \$819.3 for a total lease commitment of \$3,595. The annual lease payment for Loblaw's for 2012 is \$194 million and for Empire is \$368.3 (309.7 + 58.6). This comparison, combined with the fact that Loblaw's is more than twice the size of Empire, indicates that Empire leases a lot more of their properties than Loblaw's. Since assets under these operating leases are not reflected on the balance sheet, this would cause Empire's asset turnover ratios to be better than Loblaw's.
- (g) Both companies generate the similar returns on each dollar of sales as shown by the similar profit margins. Given that Empire leases more of their assets, these operating leases are reported as expenses. So, even though Empire has a higher asset turnover, which would normally indicate higher profitability, since the leasing costs of the assets would cause the expenses to be higher (in comparison to Loblaw's), this results in the profit margins being similar for both companies.

RA10-4 First Capital Realty

- (a) First Capital Realty is a Canadian company involved in ownership, development and operation of supermarket and drugstore-anchored neighbourhood and community shopping centres located predominantly in growing urban markets. The company currently owns interests in 169 properties and trades on the Toronto Stock Exchange.
- (b) If we look at the 2010 figures prepared under IFRS in the 2011 financial statements, the single most significant difference between reporting under Canadian GAAP versus IFRS is that the IFRS statements reflect investment properties accounted for using the fair value model. Consequently, these assets are recorded at fair market values and no related depreciation is charged. For the statements prepared under Canadian GAAP, the cost model has been used for all the capital assets, resulting in assets being reported at cost less accumulated depreciation charges and impairment losses.

These differences in the accounting policies related to the assets results in two significant differences on the Income Statements:

- Under IFRS, there is a "Net adjustment to fair value for investment properties" of \$273,663,000, where there is no comparison under Canadian GAAP. This causes a large difference in the net income reported under Canadian GAAP in comparison to net income under IFRS.
- Under Canadian GAAP, Depreciation and Amortization expense is reported as \$90,949,000 for shopping centres, an investment property, while under the IFRS statements there is no depreciation reported.

These differences in the accounting policies for the capital assets also impact the balance sheet with the amounts reported for Investment Properties and Development Properties being significantly different as seen below:

Investment Properties	IFRS	Canadian GAAP
Shopping Centres	4,734,574	3,578,960
Development Land	88,859	306,843

RA10-4 (Continued)

(c) Providing information that is relevant, reliable and understandable are objectives of financial reporting. The financial statements prepared under International standards provide more relevant information than those prepared under Canadian GAAP in that market value of property is a more relevant figure than is historical cost less accumulated depreciation. It could be argued that the historical cost figure is more reliable since cost is a much less subjective and more easily verifiable number than is fair value. As long as the values used for fair value are sufficiently objective and verifiable, I believe the relevance of the fair value valuation outweighs the verifiability of the historical cost figure. The fact that depreciation charges are somewhat arbitrary in how they are calculated is also an argument against the historical cost less accumulated depreciation valuation method. Another objective is to help users predict future cash flows for the company. Using fair market values could also be argued to give better information on this. For these reasons, it appears the IFRS Financial Statements come closer to meeting the objectives of financial reporting than do the Canadian GAAP based statements.

(d) As per Note 2 of the 2011 Financial Statements, the fair value of Investment Properties are determined using both internal and external appraisals. More specifically, the following methods are employed:

- Shopping centres are appraised using the income approach and appraisers make use of both the direct capitalization method and the discounted cash flow method (including estimates for future disposal)
- Non-development or redevelopment properties are valued based on stabilized cash flows at its existing state while properties undergoing development are valued based on stabilized cash flows expected upon completion (with deduction of costs to complete the project)
- Development land is appraised using the comparable sales approach, which considers recent sales activity for similar land parcels in the same or similar markets to estimate a value per acre

RA 10-5 EXTRACTIVE INDUSTRIES

(a) BHP Billiton is a large producer of major commodities including iron ore, metallurgical coal, conventional and non-conventional oil and gas, copper, energy coal, aluminium, manganese, uranium, nickel and silver with operations world-wide. Newfield Exploration Company is an independent energy company engaged in the exploration, development and production of crude oil, natural gas and natural gas liquids. Domestically, the company has operations in Middle America, Rocky Mountains region and onshore Texas. Internationally, the company focuses on Malaysia and China offshore developments.

(b) BHP Billiton follows IFRS and accounts for exploration and evaluation expenditures as capital assets only when (Note 1):

- With respect to mineral activities - it has been established that the site will be commercially viable (or the costs relate to an area which was previously acquired in a business acquisition and measured at fair value on acquisition)
- With respect to petroleum activities – it is expected that the expenditures will be recovered through development or sale; or at the report date, the commercially recoverable reserves has not yet been established.

The type of costs included in exploration and evaluation include: the search for resources, the determination of technical feasibility, and the assessment of commercial viability. Specifically, exploration and evaluation expenditures include:

- research and analysis of the exploration data
- gathering exploration data using topographical, geochemical and geophysical studies
- exploratory drilling, trenching and sampling
- determining and examining the volume and grade of the resource surveying transportation and infrastructure requirements, and
- conducting market and finance studies.

License costs are capitalized and amortized over the term of the permit. Only administrative costs directly related are capitalized.

When these costs are capitalized, they are included in property, plant and equipment. However, since the assets are not available for use, they are not depreciated.

RA 10-5 (Continued)

Once the site is determined to have proven reserves and will be developed, these exploration and evaluation costs are reclassified to "Assets under construction" (part of PP&E). All subsequent developments costs are capitalized as part of these assets. Once the development phase is completed, the "Assets under construction" are transferred to either "Plant and equipment" or "Other mineral assets" at which time they will put into production and depreciated.

- (c) Newfield follows US GAAP and from Note 1, it states the company uses the full cost method of accounting which capitalizes all costs related to exploration, evaluation and development of oil and gas reserves. These types of costs include: land acquisition, exploration and development of oil and gas properties, associated salaries, benefits and other internal costs. The accumulated costs, less costs of acquisitions of unproved properties are depleted (i.e. depreciated) using the units-of-production method. The costs of acquiring and evaluating unproved properties are initially excluded from the depletion calculations.
- (d) BHP Billiton uses the successful efforts in that once the site is determined to be not commercially viable, the costs of exploration and evaluation are expensed. In the case of Newfield, all costs for proven and unproven sites are capitalized, which is the full cost method. Both methods are historical cost methods and require the assets to be depreciated. However, the full cost method will result in higher asset balances and subsequent depreciation charges will be higher. The successful efforts will have higher expenses initially, but depreciation charges would be lower, since the capital costs are lower.
- (e) To determine the fair market value of the mineral reserves, the best method would likely be discounted future cash flows, which would require substantial assumptions related to:
- the quantity of minerals or oil and gas that could be recovered from the site ;
 - the quality of the minerals and oil and gas that could be recovered
 - how much the annual production would be
 - commodity prices that the minerals or oil and gas could be sold for in the future
 - development and operating costs to be incurred to produce
 - exchange rates for foreign operations, and commodity prices, and
 - discount rate to present value the cash flows.

RA 10-5 (Continued)

For the fair value method, there is a lot of uncertainty around the assumptions, especially in the early stages of production. For example, how accurate will the total amount produced from the site be? Can these resources be economically produced? What will the market price for the commodities actually be when the production is completed? In addition, the fair value would have to be prepared for each property, which would be very time consuming.

- (f) Likely historical cost is the best method for faithfully representing the asset on the balance sheet. The costs have actually been incurred and no assumptions are required. On the other hand, fair value would be more relevant from a user's perspective since it would give some indication of future cash flow potential of the site.

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CHAPTER 11

DEPRECIATION, IMPAIRMENT, AND DISPOSITION

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems	Writing Assignments
1. Concept of depreciation.	1	1		
2. Factors in determining depreciation charges.	2, 3	2, 9, 10, 22	1, 2, 4, 5, 7, 11	1, 2
3. Meaning and choice of methods.	4, 5, 6, 7	1, 2, 3, 4, 5, 28	1, 2, 4, 5, 7, 11	1
4. Calculation of depreciation.	4, 5, 6, 7	2, 3, 4, 5, 6, 7,,8, 9, 10, 23, 28	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 14, 15, 17	1, 3
5. Depletion.	8, 9	11, 12, 13	9, 10	
6. Errors; Changes in estimates.	9	14, 15, 16, 22, 23	2, 5, 6, 11, 15	
7. Impairment.	10, 11, 12, 13, 14, 15	17, 18, 19, 20, 21	12	3
8. Assets held for sale.	16	21	3, 6, 13, 15	

ASSIGNMENT CLASSIFICATION TABLE (CONTINUED)

Topics	Brief Exercises	Exercises	Problems	Writing Assignments
9. Dispositions.	17, 18	22, 23, 24, 25, 26	3, 6, 13, 15	5
10. Disclosures.			12, 13	
11. Ratio analysis.	19	27	7	
12. Differences between ASPE and IFRS.				4, 6, 7
13. Tax depreciation (CCA).	20	28, 29, 30	1, 2, 4, 16, 17	

*This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E11-1	Choice of depreciation method.	Moderate	15-20
E11-2	Depreciation calculations—SL, DDB.	Simple	10-15
E11-3	Depreciation calculations—SL, DDB—partial periods.	Simple	15-20
E11-4	Depreciation calculations—five methods, partial periods.	Moderate	20-30
E11-5	Depreciation calculations—SL, DDB—partial periods.	Moderate	25-35
E11-6	Depreciation calculations—SL, DDB.	Simple	15-20
E11-7	Depreciation—conceptual understanding.	Moderate	20-25
E11-8	Depreciation for fractional periods.	Moderate	25-35
E11-9	Error analysis and depreciation—SL and DDB.	Simple	10-15
E11-10	Error analysis and depreciation—SL and DDB.	Moderate	20-25
E11-11	Depletion calculations—timber.	Simple	15-20
E11-12	Depletion calculations—oil.	Simple	10-15
E11-13	Depletion calculations—minerals.	Simple	15-20
E11-14	Depreciation—change in estimate.	Simple	10-15
E11-15	Depreciation calculation—addition, change in estimate.	Simple	20-25
E11-16	Depreciation—replacement, change in estimate.	Simple	15-20
E11-17	Impairment—cost recovery model.	Moderate	20-25
E11-18	Impairment—cash-generating units.	Simple	10-15
E11-19	Impairment—rational entity model and cash-generating units.	Moderate	20-25
E11-20	Impairment—cost recovery and rational entity models.	Moderate	20-25
E11-21	Impairment—cost recovery and rational entity models.	Moderate	15-20
E11-22	Depreciation calculation—replacement, trade-in.	Moderate	20-25
E11-23	Depreciation calculations—revaluation model, change in estimate, disposal	Moderate	20-25
E11-24	Entries for disposition of assets.	Simple	10-15
E11-25	Entries for disposition of assets.	Moderate	20-25
E11-26	Disposition of assets.	Simple	10-15
E11-27	Ratio analysis.	Moderate	15-25
*E11-28	Depreciation calculations—four methods, partial periods.	Simple	10-15

ASSIGNMENT CHARACTERISTICS TABLE (CONTINUED)

Item	Description	Level of Difficulty	Time (minutes)
*E11-29	CCA calculations.	Moderate	15-20
*E11-30	Book versus tax (CCA) depreciation.	Moderate	15-20
P11-1	Calculation of cost and depreciation for partial periods—SL, DDB, and CCA.	Simple	25-30
P11-2	Depreciation for partial periods—SL, Activity, DDB, and CCA.	Moderate	25-35
P11-3	Depreciation—partial periods, machinery.	Moderate	30-45
P11-4	Depreciation – SL, DDB, UOP and CCA	Moderate	25-35
P11-5	Depreciation—Activity, SL, and DDB.	Moderate	30-45
P11-6	Depreciation and error analysis.	Complex	45-60
P11-7	Selecting an depreciation method – impact on decisions	Complex	60-70
P11-9	Depletion and depreciation – mining.	Moderate	25-35
P11-10	Depletion, timber.	Moderate	25-30
P11-11	Comprehensive fixed-asset problem.	Moderate	25-35
P11-12	Impairment and asset held for sale.	Moderate	25-35
P11-13	Dispositions, including condemnation, demolition, and trade-in.	Moderate	35-40
P11-14	Comprehensive depreciation calculations.	Complex	45-60
P11-15	Comprehensive depreciation calculations, trade-in, revised estimates.	Complex	45-60
*P11-16	Capital cost allowance, terminal losses, recapture and capital gains.	Moderate	25-35
*P11-17	Government assistance and tax values.	Moderate	25-35

* Includes material covered in an Appendix to the chapter.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 11-1

Recording and reporting accumulated depreciation and impairment losses provides users with relevant and faithfully representative information. Accumulated depreciation is the total cost of existing property, plant, and equipment that has been allocated and matched to the revenues that it helped generate. This is relevant information; for example, a high amount of accumulated depreciation relative to total cost would help users understand that the existing property, plant, and equipment has been available for use in generating revenues for a long period of time, or has been used extensively in generating revenues. Recording accumulated depreciation results in faithfully representative, neutral financial statements that are free from bias. Accumulated impairment losses is the cumulative amount of impairment losses that have been recorded for existing property, plant, and equipment. An impairment loss is recorded when carrying amount of an asset exceeds its recoverable amount. Recording an impairment loss provides users with faithfully representative and neutral information about the expected benefit to be realized from an asset, relative to its carrying amount.

BRIEF EXERCISE 11-2

(a)

Under IFRS, asset componentization is more strictly applied. The aircraft engines would be recorded and depreciated separately from the aircraft's body.

October 1, 2014

Aircraft – Engines	20,000,000	
Aircraft – Body	80,000,000	
Cash		100,000,000

December 31, 2014

Depreciation Expense	2,325,000	
Accumulated Depreciation – Aircraft - Engines.....		450,000 *
Accumulated Depreciation – Aircraft - Body.....		1,875,000 **

* $(\$20,000,000 - \$2,000,000) / 10 \times 3/12 = \$450,000$

** $(\$80,000,000 - \$5,000,000) / 10 \times 3/12 = \$1,875,000$

(b)

Under ASPE, the practice has been not to recognize asset components to the same extent as under IFRS. For example, under ASPE, Ocean Airways may record the purchase of the aircraft without asset componentization, in which case the total \$100 million cost of the aircraft would be recorded in one Aircraft asset account on October 1, 2014, and depreciation expense would be calculated based on useful life of the entire aircraft.

BRIEF EXERCISE 11-3

$$\text{Original Cost} = \$30,000 + \$200 + \$100 + \$500 + \$400 = \$31,200$$

$$(a) \quad \frac{\$31,200 - \$6,000}{10} \times 6/12 = \underline{\underline{\$1,260}}$$

$$(b) \quad \frac{\$31,200 - \$0}{12} \times 6/12 = \underline{\underline{\$1,300}}$$

Under ASPE, depreciation expense is the larger of (a) original cost less salvage value over the asset's total expected life (\$1,300), and (b) original cost less residual value over the asset's useful life to the entity (\$1,260 calculated in part (a) above).

BRIEF EXERCISE 11-4

$$(a) \quad \frac{\$100,000 - \$25,000}{8} \times 10/12 = \underline{\underline{\$7,813}}$$

$$(b) \quad \frac{\$100,000 - \$0}{10} \times 10/12 = \underline{\underline{\$8,333}}$$

Under ASPE, depreciation expense is the larger of the original cost less salvage value over the asset's total expected life (\$8,333), and the original cost less residual value over the asset's useful life to the entity (\$7,813 calculated in part (a) above).

BRIEF EXERCISE 11-5

$$(a) \quad \frac{\$60,000 - \$6,000}{8} = \underline{\underline{\$6,750}}$$

$$(b) \quad \frac{\$60,000 - \$6,000}{8} \times 4/12 = \underline{\underline{\$2,250}}$$

BRIEF EXERCISE 11-6

* Rate on declining balance = $(100\% \div 8) \times 2 = 25\%$

$$(a) \quad \$60,000 \times 25\% = \underline{\underline{\$15,000}}$$

January 1 to December 31, 2014

$$(b) \quad 2014 \text{ Depreciation expense} = 3/12 \times \$15,000 = \$3,750$$

2015 depreciation expense is either:

$$(\$60,000 \times 25\% \times 9/12) + (\$45,000 \times 25\% \times 3/12) = \underline{\underline{\$14,063}}$$

Or:

$$\text{Carrying amount, Dec. 31/14 } (\$60,000 - \$3,750) = \$56,250$$

$$2015 \text{ depreciation: } \$56,250 \times 25\% = \underline{\underline{\$14,063}}$$

(c)

If the benefits of the asset are expected to flow to the entity evenly over time, and if the decline in usefulness of the asset is expected to be constant from period to period, there is justification for using the straight-line method. If the greatest benefits of the asset are expected to be yielded in the early years, the declining-balance method better reflects the pattern of use.

BRIEF EXERCISE 11-7

(a) $(\$60,000 - \$6,000) \times 8/36^{**} = \underline{\underline{\$12,000}}$

**** The sum-of-the-years'-digits method is a decreasing charge method. The denominator of the fraction equals the sum of the digits of the asset's useful life (in this example, $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36$). The numerator decreases year by year, and in the first year of the asset's use, it is equal to the total useful life of the asset.**

(b) $[(\$60,000 - \$6,000) \times 8/36] \times 9/12 = \underline{\underline{\$9,000}}$

BRIEF EXERCISE 11-8

2014: $\frac{(\$48,000 - \$3,000) \times 52,000}{275,000} = \underline{\underline{\$8,509}}$

2015: $\frac{(\$48,000 - \$3,000) \times 65,000}{275,000} = \underline{\underline{\$10,636}}$

Alternatively, a rate per km may be computed (\$0.1636) and this amount applied to the km driven in each year to determine depreciation expense.

BRIEF EXERCISE 11-9

Inventory	97,650	
Accumulated Depletion		84,150
Asset Retirement Obligation		13,500*

$$\frac{\$500,000 + \$125,000 + \$75,000 - \$157,500}{5,000} = \underline{\underline{\$108.50 \text{ per tonne}}}$$

$$900 \times \$108.50 = \underline{\underline{\$97,650}}$$

*Liability for Future Site Restoration:

$$\frac{\$75,000}{5,000} = \underline{\underline{\$15.00 \text{ per tonne}}}$$

$$900 \times \$15.00 = \underline{\underline{\$13,500}}$$

Note: It is likely that the site restoration costs are a function of mining the ore, and an incremental cost caused by production. Under IFRS, any site remediation costs associated with production are charged to inventory as a product cost when the site is “disfigured”. This differs from ASPE which requires that any site remediation costs be capitalized as part of the cost of the original asset acquired.

BRIEF EXERCISE 11-10

$$\text{Annual depreciation expense: } (\$7,000 - \$1,000) / 5 = \underline{\underline{\$1,200}}$$

$$\text{Carrying amount, 1/1/16: } \$7,000 - (2 \times \$1,200) = \underline{\underline{\$4,600}}$$

$$\text{Depreciation expense, 2016: } (\$4,600 - \$500) / 2 = \underline{\underline{\$2,050}}$$

BRIEF EXERCISE 11-11

Recoverability test:

Undiscounted future net cash flows (\$500,000) < Carrying amount (\$540,000); therefore, the asset is impaired.

Journal entry:

Loss on Impairment	140,000	
Accumulated Impairment Losses -		
Machinery		140,000
(\$540,000 – \$400,000)		

BRIEF EXERCISE 11-12

- (a) No entry. Under the cost recovery impairment model, the subsequent recovery of an impairment loss is not restored for property, plant, and equipment held for use.
- (b) Under the rational entity impairment model, an impairment loss is reversed if there is a change in the estimates used to calculate recoverable amount. However, the reversal amount is limited. The specific asset cannot be increased in value to more than what its book value would have been, net of depreciation, if the original impairment loss had never been recognized.

BRIEF EXERCISE 11-13

(a)

Under IFRS, the recoverable amount is the higher of (1) the asset's value in use and (2) its fair value less costs to sell. In this case, even though the asset was scrapped on January 1, 2015, its value in use as of November 30, 2014 was \$800,000. The recoverable amount of \$800,000 is lower than the carrying amount of \$1,000,000; therefore the asset is impaired as of the date of the financial statements.

Note: The scrapping of the asset should be disclosed as a post-balance sheet subsequent event if material.

(b)

Under ASPE, the recoverable amount is the undiscounted net future cash flows from use and eventual disposal. The recoverable amount of \$1,100,000 is higher than the carrying amount of \$1,000,000; therefore the asset is not impaired as of the date of the financial statements.

Note: The scrapping of the asset should be disclosed as a post-balance sheet subsequent event if material.

BRIEF EXERCISE 11-14

(a)

At December 31, 2014:

The recoverable amount is \$425,000 (the higher of the asset's (1) value in use of \$425,000 and (2) fair value less costs to sell of \$400,000).

Impairment loss:

Carrying amount.....	\$500,000	
Less: Recoverable amount.....	<u>425,000</u>	
Impairment loss.....	<u>\$ 75,000</u>	
Loss on Impairment	75,000	
Accumulated Impairment Losses		
Land.....		75,000
(\$500,000 – \$425,000)		

(b)

At December 31, 2015:

Accumulated Impairment Losses –		
Land.....	75,000	
Recovery of Loss from		
Impairment		75,000
(\$500,000 – \$425,000)		

Reversal of the impairment loss is limited to the amount required to increase the asset's carrying amount to what it would have been if the impairment loss had not been recorded. In this case the original cost of the land is \$500,000 and accumulated impairment losses recorded to date is \$75,000. Since the current recoverable amount of \$550,000 (higher of value in use of \$550,000 and fair value less costs to sell of \$480,000) is higher than the original cost of the land, recovery of impairment losses is limited to \$75,000.

BRIEF EXERCISE 11-15

(a)

Under ASPE, because the buildings and equipment are specialized and cannot generate cash flows on their own, they are combined into an asset group with the land. The carrying amount of the asset group is \$60,000. The cost recovery model applies a recoverability test to determine if there is impairment. The asset group's carrying amount of \$60,000 is compared to undiscounted net future cash flows of \$70,000. Since the asset group's carrying amount can be recovered (i.e. the asset group's undiscounted net future cash flows are greater than the asset group's carrying amount), there is no impairment, and no impairment loss is recorded.

(b)

Under the IFRS rational entity model, the cash generating unit's (CGU's) carrying amount of \$60,000 is compared to recoverable amount of \$45,000 (the higher of the CGU's value in use of \$45,000 and fair value less costs to sell of \$35,000).

Carrying amount of CGU.....	\$60,000
Less: Recoverable amount.....	<u>45,000</u>
Impairment loss.....	<u>\$15,000</u>

The impairment loss is then allocated to the individual assets in the CGU, but no individual asset can be reduced to below the highest of (1) its value in use, (2) its fair value less costs to sell, or (3) zero. In this case, the land is not impaired (recoverable amount is greater than carrying amount), thus the \$15,000 loss is allocated to the buildings and equipment.

Allocation:	Carrying Amount	Proportion	Loss Allocation
Buildings	\$30,000	30/40	\$ 11,250
Equipment	<u>10,000</u>	10/40	<u>3,750</u>
	<u>\$40,000</u>		<u>\$15,000</u>

BRIEF EXERCISE 11-15 (Continued)

The journal entry to record the impairment is:

Loss on Impairment	15,000	
Accumulated Impairment Losses– Building.....		11,250
Accumulated Impairment Losses– Equipment.....		3,750

BRIEF EXERCISE 11-16

(a) Loss on Impairment	500,000 *	
Accumulated Impairment Losses – Building		500,000

* \$1,500,000 - \$1,000,000 = \$500,000

Note: Assets that are held for sale are not depreciated while they are held for sale.

(b)

Under IFRS, since the building meets the stringent requirements for classification as held for sale, the building would also meet criteria for classification as a current asset on the statement of financial position.

(c)

Under ASPE, the building can be classified as a current asset on the statement of financial position only if it is sold before the financial statements are completed, and the proceeds to be received qualify as a current asset. Otherwise, the building would be classified as a non-current asset.

BRIEF EXERCISE 11-17

(a)	Depreciation Expense (\$3,000 X 8/12) ..	2,000	
	Accumulated Depreciation -		
	Machinery		2,000
(b)	Cash	13,500	
	Accumulated Depreciation -		
	Machinery	8,000	
	Machinery		20,000
	Gain on Disposal of Machinery....		1,500

BRIEF EXERCISE 11-18

(a)	Depreciation Expense (\$3,000 X 8/12) ..	2,000	
	Accumulated Depreciation -		
	Machinery		2,000
(b)	Cash	5,200	
	Loss on Disposal of Machinery	6,800	
	Accumulated Depreciation -		
	Machinery	8,000	
	Machinery		20,000

BRIEF EXERCISE 11-19

(a) Asset turnover ratio:

$$\frac{\$2,687}{(\$1,923 + \$2,487)/2} = 1.22 \text{ times}$$

(b) Profit margin:

$$\frac{\$52}{\$2,687} = 1.94\%$$

(c) Rate of return on assets:

1. $1.94\% \times 1.22 = 2.36\%$, or

2. $\frac{\$52}{(\$1,923 + \$2,487)/2} = 2.36\%$

*BRIEF EXERCISE 11-20

2014:	\$45,000 X 20% X 1/2	=	\$ 4,500
2015:	\$40,500 X 20%	=	8,100
2016:	\$32,400 X 20%	=	6,480
2017:	\$25,920 X 20%	=	5,184

SOLUTIONS TO EXERCISES

EXERCISE 11-1 (15-20 minutes)

(a) Factors to consider in establishing the asset's useful life include the following:

- **physical life of the asset (this may be the case for example for the board room table and chairs, weight and aerobic equipment and trucks based on kilometres);**
- **timing of replacement by more efficient and economical assets (for example dental equipment); and**
- **obsolescence due to new technological advances (for example, computers) or due to new techniques (for example weight and aerobic equipment)**

(b) (1) boardroom table and chairs: straight-line method with useful life of the asset determined based on physical life of the assets. All accounting periods will benefit equally from the use of the table and chairs and the straight-line method will achieve the best matching of costs to benefits received.

(2) dental equipment: straight-line method with useful life of the asset based on supersession by more efficient and economical assets or based on new technological advances or new techniques. All accounting periods will benefit equally from the use of the dental equipment and the straight-line method will achieve the best matching of costs to benefits received.

(3) long haul trucks for the trucking business: activity method with depreciation as a function of kilometres driven. The trucks will contribute proportionately more to revenues in periods of heavier usage and this method will result in better matching of costs to revenues generated.

EXERCISE 11-1 (Continued)

- (4) weight and aerobic equipment: straight-line method with depreciation as a function of obsolescence due to new techniques and fashions in the fitness industry. For certain types of equipment, physical life may be more appropriate, where the equipment is not subject to obsolescence (for example, free weights). For certain types of equipment, a declining-balance method could also be used based on greater benefits received in the early years, for example, equipment which is subject to fashions or trends in fitness.**
- (5) classroom computers: straight-line method with useful life of the asset determined based on obsolescence due to technological advances. The computers contribute to revenues equally in all years that they are used. A declining-balance method could also be used if greater benefits are received in the early years when the equipment can be used in programs where more technologically advanced equipment is required to attract students to the college, or where repair costs increase as the equipment gets older. The equipment would then be rotated to open labs for general students and to staff after a few years of use. For either the straight-line or declining balance methods, a group method would likely be used because of the large numbers of individual computers used.**
- (c) Estimates of asset useful life are estimates of expected benefit or utility to the company. Arriving at a good estimate of asset useful life requires information about expected usage, expected repairs, planned maintenance, and eventual technical or commercial obsolescence. With this information, a company can also manage its assets better, ensure that expected asset benefit or utility to the company is yielded, and run its business more efficiently.**

EXERCISE 11-2 (10-15 minutes)

**(a) Total cost of property = \$220,000 + \$3,000 + \$1,500
= \$224,500**

Cost of the building = \$224,500 X 75% = \$168,375

**(b) Depreciable amount = Cost – Residual Value
= \$168,375 – \$115,000 = \$53,375**

(c) Useful life is limited to 10 years. This is the number of years the building will contribute economic benefits to the company.

**(d) Depreciation expense 2014 (straight-line)
= (\$168,375 – \$115,000) / 10 X 3.5 months/12 = \$1,557**

**(e) Depreciation expense 2014 (double-declining)
= \$168,375 X 20%* X 3.5 months/12 = \$9,822**

**Depreciation expense 2015 = (\$168,375 – \$9,822) X 20%*
= \$31,711**

*** Rate = (1 ÷ 10) X 2 = 20%**

(f) Carrying amount = \$168,375 – \$9,822 – \$31,711 = \$126,842

(g) Under ASPE, depreciation expense is the higher of two amounts: (1) cost less salvage value over the life of the asset, and (2) cost less residual value over the asset's useful life.

**Under ASPE, depreciation expense 2014 (straight-line)
= (\$168,375 - \$0) / 20 X 3.5 months/12 = \$2,455**

EXERCISE 11-3 (15-20 minutes)

$$(a) \quad \frac{\$769,000 - \$300,000}{20 \text{ years}} = \$23,450 \text{ per year}$$

$$2014: \$23,450 \times 9/12 = \underline{\$17,588}$$

$$2015: \underline{\$23,450}$$

$$(b) \quad \frac{100\%}{20} = 5\%; 5\% \times 2 = 10\%$$

$$9/12 \times 10\% \times \$769,000 = \underline{\$57,675} \text{ for 2014}$$

$$10\% \times (\$769,000 - \$57,675) = \underline{\$71,133} \text{ for 2015}$$

OR

$$\begin{array}{rcl} 3/12 \times 10\% \times \$769,000 & = & \$19,225 \\ + \quad 9/12 \times 10\% \times (\$769,000 - \$76,900) & = & \underline{51,908} \\ & & \underline{\$71,133} \text{ for 2015} \end{array}$$

These two differing approaches will always yield the same result.

$$(c) \quad \frac{\$769,000 - \$0}{30 \text{ years}} = \$25,633 \text{ per year}$$

$$2014: \$25,633 \times 9/12 = \underline{\$19,225}$$

$$2015: \underline{\$25,633}$$

Under ASPE, depreciation expense is the higher of two amounts: (1) cost less salvage value over the life of the asset, and (2) cost less residual value over the asset's useful life.

$$(1) (\$769,000 - 0) / 30 = \$25,633$$

$$(2) (\$769,000 - \$300,000) / 20 = \$23,450$$

EXERCISE 11-3 (Continued)

- (d) It might be more appropriate to select the straight-line method if the benefits of the asset are expected to flow to the entity evenly over time, and if the decline in usefulness of the asset is expected to be constant from period to period. It might be more appropriate to select the double-declining-balance method if the greatest benefits of the asset are expected to be yielded in the early years.**

EXERCISE 11-4 (20-30 minutes)

(a) 2014 Straight-line $\frac{\$315,000 - \$15,000}{10 \text{ years}} = \$30,000/\text{year}$

(b) 2014 Output $\frac{\$315,000 - \$15,000}{240,000 \text{ total units}} = \$1.25/\text{output unit}$

$$25,500 \text{ units} \times \$1.25 = \underline{\underline{\$31,875}}$$

(c) 2014 Working hours $\frac{\$315,000 - \$15,000}{25,000 \text{ total hours}} = \$12.00/\text{hour}$

$$2,650 \text{ hours} \times \$12.00 = \underline{\underline{\$31,800}}$$

(d) Declining balance 2013: $1/10 \times 2 = 20\%$.

$$2013: 20\% \times \$315,000 \times 8/12 = \underline{\underline{\$42,000}}$$

$$2014: 20\% \times (\$315,000 - \$42,000) = \underline{\underline{\$54,600}}$$

OR

$$1^{\text{st}} \text{ full year } (20\% \times \$315,000) = \$63,000$$

$$2^{\text{nd}} \text{ full year } [20\% \times (\$315,000 - \$63,000)] = \$50,400$$

$$2013 \text{ Depreciation } 8/12 \times \$63,000 = \underline{\underline{\$42,000}}$$

$$2014 \text{ Depreciation } 4/12 \times \$63,000 = \$21,000$$

$$8/12 \times \$50,400 = \underline{\underline{\$33,600}}$$

$$\underline{\underline{\$54,600}}$$

EXERCISE 11-4 (Continued)

(e)
$$10 + 9 + 8 + 7 + 6 \\ + 5 + 4 + 3 + 2 + 1 = 55$$

OR
$$\frac{n(n+1)}{2} = \frac{10(11)}{2} = 55$$

		Allocated to	
Sum-of-the-years'-digits	Total	<u>2013</u>	<u>2014</u>
Year 1 $10/55 \times \$300,000^* =$	\$54,545	\$36,363	\$18,182
2 $9/55 \times \$300,000 =$	\$49,091		<u>32,727</u>
		<u>\$36,363</u>	<u>\$50,909</u>

2014: $\frac{\$50,909}{2} = (4/12 \text{ of } 1^{\text{st}} \text{ year of machine's life plus } 8/12 \text{ of } 2^{\text{nd}} \text{ year of machine's life}).$

*Cost of \$315,000 less residual value of \$15,000

(f) CCA 2013: $\$315,000 \times \frac{1}{2} \times 20\% = \$31,500$

CCA 2014: $(\$315,000 - \$31,500) \times 20\% = \$56,700$

(g) Since the capital cost allowance approach is required for tax purposes, for simplicity, it is common for smaller companies to use the capital cost allowance approach for financial reporting purposes as well. A potential investor would want to base their investment decision on relevant and faithfully representative information. The capital cost allowance approach is based on the rules as defined in the Income Tax Act, and may not necessarily reflect the expected usage or pattern in which the asset benefits are expected to be consumed, rendering financial statements not as relevant to a potential investor. However, the capital cost allowance approach requires no estimates of residual value, salvage value, useful life, or physical life. As a result, calculation of depreciation expense may be more neutral and free from bias.

EXERCISE 11-5 (25-35 minutes)

Methods of Depreciation

<u>Descri- ption</u>	<u>Date Purcha- sed</u>	<u>Cost</u>	<u>Residual</u>	<u>Life</u>	<u>Method</u>	<u>Accum. Depr. to 2014</u>	<u>2015 Depr.</u>
A	12/02/13	142,500	16,000	10	DDB	39,900	20,520
B	08/15/12	79,000	21,000	5	SL	29,000	11,600
C	07/21/11	75,400	23,500	8	DDB	47,567	4,333

(a) Machine A—Testing the methods:

Straight Line Method for 2013	\$ 6,325.00
Straight Line Method for 2014	<u>12,650.00</u>
Total Straight Line	<u><u>\$18,975.00</u></u>

Double Declining Balance for 2013	
= (\$142,500 X .2 X .5)	\$14,250.00
Double Declining Balance for 2014	
= (\$142,500 - \$14,250) X .2	<u>25,650.00</u>

Total Double Declining Balance \$39,900.00

(b) 2015 depreciation = (\$142,500 – \$39,900) X .20 = \$20,520

(c) and (d) Machine B—Calculation of the cost

- Asset has been depreciated for 2 1/2 years using the straight line method.
- Annual depreciation is then equal to \$29,000 divided by 2.5 or \$11,600.
- \$11,600 times 5 plus the residual value is equal to the cost
- Cost is \$79,000

EXERCISE 11-5 (Continued)

(e) Machine C—Using the double-declining balance method of depreciation

2011's depreciation is	\$ 9,425.00	(75,400 X .25 X .5)
2012's depreciation is	16,493.75	
2013's depreciation is	12,370.31	
2014's depreciation is	<u>9,277.73</u>	
	<u>\$47,566.79</u>	

(f) Using DDB, 2015 Depreciation is \$4,333.21*

***to reduce to \$23,500 residual value [(\$75,400 – \$47,566.79) = \$27,833.21 – \$23,500 = \$4,333.21].**

NOTE: \$27,833.21 x .25 = \$6,958. This amount of depreciation would reduce the carrying amount lower than the residual value. Therefore depreciation must be limited to \$4,333.21.

EXERCISE 11-6 (15-20 minutes)

- (a) Straight-line method depreciation for each of Years 2014 through 2016 =

$$\frac{\$387,000 - \$39,000}{12} = \underline{\underline{\$29,000}}$$

- (b) Double-Declining Balance method $\frac{100\%}{12} \times 2 = 16.67\%$ depreciation rate.

$\$387,000 \times 16.67\% =$	<u>\$64,513</u> depreciation 2014
$(\$387,000 - \$64,513) \times 16.67\% =$	<u>\$53,759</u> depreciation 2015
$(\$387,000 - \$64,513 - \$53,759) \times 16.67\% =$	<u>\$44,797</u> depreciation 2016

(c)	Equipment – Input Device	55,000	
	Equipment – Processor	132,000	
	Equipment – Output Device	200,000	
	Cash		387,000

- (d) Depreciation for 2014:

Input device $(\$55,000 - \$5,000) / 5 =$	\$10,000
Processor $(\$132,000 - \$12,000) / 10 =$	\$12,000
Output device $\$200,000 \times 16.67\% =$	<u>\$33,340</u>
Depreciation for 2014	<u>\$55,340</u>

* The output device is expected to provide the greatest benefits in the early years, therefore the double declining balance method would be an appropriate method because the depreciation charges are also higher in the early years.

EXERCISE 11-7 (20-25 minutes)

- (a) Examination of the depreciation schedule under declining balance indicates there is a residual value, as the depreciation amount in the fourth year is truncated to an amount less than the continuation of the series of the first three years. When there is any residual value and the amount is unknown (as is the case here), the cost would have to be determined by looking at the data for the double-declining balance method.

$$\frac{100\%}{5} = 20\%; 20\% \times 2 = 40\%$$

$$\text{Cost} \times 40\% = \$30,000$$

$$\$30,000 \div .40 = \underline{\underline{\$75,000}} \text{ Cost of asset}$$

- (b) \$75,000 cost [from (a)] – \$60,000 total depreciation
= \$15,000 residual value.
- (c) The lowest charge to income for Year 1 will be yielded by the straight-line method, and this will yield the higher net income.
- (d) The highest charge to income for Year 4 will be yielded by the straight-line method.
- (e) The method that produces the highest carrying amount at the end of Year 3 would be the method that yields the lowest accumulated depreciation at the end of Year 3 which is the straight-line method.

Calculations:

$$\text{St.-line} = \$75,000 - (\$12,000 + \$12,000 + \$12,000) = \$39,000$$

carrying amount, end of Year 3.

$$\text{D.D.B.} = \$75,000 - (\$30,000 + \$18,000 + \$10,800) = \$16,200$$

carrying amount, end of Year 3.

EXERCISE 11-7 (Continued)

- (f) Since CCA must be used for tax purposes, neither the straight-line, nor the double-declining balance method will impact cash flows in any of the years. Net income must be converted to taxable income by removing the accounting depreciation and substituting capital cost allowance.**
- (g) The double-declining balance method in this case: The method that will yield the highest gain (or lowest loss) if the asset is sold at the end of Year 3 is the method which will yield the lowest carrying amount [see part (e)] at the end of Year 3.**

EXERCISE 11-8 (25-35 minutes)

(a)	2007	2008- 2013	2014	Total
1. $\$192,000 - \$16,800 = \$175,200$ $\$175,200 \div 12 = \$14,600$ per yr. (\$40 per day) 133/365 of \$14,600 = \$5,320 2008-2013 incl. (6 X \$14,600) \$87,600 68/365 of \$14,600 = \$2,720				\$ 95,640
2. 0	0	87,600	14,600	102,200
3. 14,600	14,600	87,600	0	102,200
4. 7,300	7,300	87,600	7,300	102,200
5. 4/12 of \$14,600 2008-2013 incl. 3/12 of \$14,600	4,867	87,600		
			3,650	96,117
6. 0	0	87,600	0	87,600

- (b) The most accurate distribution of cost is given by methods 1 and 5 if it is assumed that straight-line is satisfactory. Reasonable accuracy is normally given by 2, 3, or 4. The simplest of the applications are 6, 2, 3, 4, 5, and 1, in about that order. Methods 2, 3, and 4 combine reasonable accuracy with simplicity of application.

EXERCISE 11-9 (10-15 minutes)

(a)

Depreciation taken (DDB): \$60,000 X 40%.....	\$24,000
Correct depreciation (SL): (\$60,000 – \$5,000) / 5 years	<u>11,000</u>
Overstatement of depreciation.....	<u>\$13,000</u>

The correcting entry needed is as follows:

Accumulated Depreciation–Machinery .	13,000	
Depreciation Expense		13,000

Calculation of corrected net income:

Net income as reported.....	\$53,000
Add: Overstatement of depreciation expense.....	<u>13,000</u>
Corrected net income	<u>\$66,000</u>

(b) A potential investor would want to base their investment decision on relevant and faithfully representative information. If the error was not detected and corrected by Gibbs, net income in 2014 would be understated, and total assets at end of 2014 would be understated. The financial statements would be less relevant (they would have less predictive value), and the financial statements would not be as faithfully representative (they would not be free from error). As well, comparability of the financial statements with financial statements of previous periods, would be compromised. A potential investor might forego investing in Gibbs, based on this understated amount of net income and total assets.

EXERCISE 11-10 (20-25 minutes)

(a)	Maintenance and Repairs Expense	500	
	Equipment		500

(b) The proper ending balance in the asset account is:

January 1 balance		\$134,750	
Add new equipment:			
Purchases	\$32,000		
Freight	700		
Installation	<u>2,700</u>		
		35,400	
Less cost of equipment sold		<u>(23,000)</u>	
		<u>\$147,150</u>	

For equipment purchased in 2012: \$111,750 (\$134,750 – \$23,000)
of the cost of equipment purchased in 2012, is still on hand.

1. Straight-line:

\$111,750 / 10 =	\$11,175
For equipment purchased in 2014: \$35,400 / 10 =	<u>3,540</u>
Total	<u>\$14,715</u>

2. Declining-balance:

Carrying amount of the 2012 equipment:

2012: \$134,750 X 20% = \$26,950

2013: (\$134,750 – \$26,950) X 20% = \$21,560

Carrying amount at end of 2013:

(\$134,750 – \$26,950 – \$21,560) = \$86,240

Carrying amount of equipment sold in 2014:

(\$23,000 X (1–20%)²) = \$14,720

EXERCISE 11-10 (Continued)

Carrying amount of equipment at end of 2013:

$$(\$86,240^* - 14,720) = \$71,520$$

(excluding equipment sold in 2014)

$$\$71,520 \times 20\% = \$14,304$$

For equipment purchased in 2014:

$$\$35,400 \times 20\% = \underline{7,080}$$

$$\text{Total} \quad \underline{\underline{\$21,384}}$$

*** Carrying amount at end of 2013 (calculated above)**

OR :

Carrying amount of remaining equipment at end of 2013:

$$(\$134,750 - \$23,000) \times (1 - 20\%)^2 = \$71,520$$

$$\text{Depreciation for 2014} = (\$71,520 + \$35,400) \times 20\% = \$21,384$$

EXERCISE 11-11 (15-20 minutes)

- (a) **Depletion charge:**
Depreciable Cost of Timberland:
 $\$1,400 - \$420 = \$980$ per hectare
Total depreciable cost: $\$980 \times 9,000$ hectares
 $= \$8,820,000$ of value of timber
Depletion Rate $= (\$8,820,000 \div 3,500,000 \text{ m}^3) = \$2.52$ per m^3
Depletion charge (and portion of depletion included in cost of timber sold in 2003) $= \$2.52 \times 700,000 \text{ m}^3 = \$1,764,000$
- (b) **Cost of Timber Sold related to depletion:**
 $\$8,820,000 - \$1,764,000 = \$7,056,000$
 $\$7,056,000 + \$100,000 = \$7,156,000$
 $(\$7,156,000 \div 5,000,000 \text{ m}^3) \times 900,000 \text{ m}^3 = \$1,288,080$
- (c) The spraying costs as well as the costs to maintain the fire lanes and roads are expensed each period and are not part of the depletion base. The company would record them as follows:
- | | | |
|---------------------------------|----------|----------|
| Maintenance and Repairs Expense | \$10,000 | |
| Cash | | \$10,000 |
- (d) The Fire Lanes and Roads would be depreciated over their useful life. They have a physical life of 30 years. However, if the lanes' and roads' useful life can be directly assigned to the timberland and the production that is estimated to take place over a shorter span than 30 years, the depreciation would be calculated on a units-of-production basis over the quantity of timber to be extracted. Since the company is maintaining its timberland and is planting new seedlings, it is likely that the timberland will last for more than 30 years.

EXERCISE 11-11 (Continued)

- (e) **IAS 41 *Agriculture*** is applied to accounting for biological assets, agricultural produce at the point of harvest, and government grants involving biological assets measured at fair value less costs to sell. In the case of forestry companies, the biological assets to be measured at fair value less costs to sell according to IAS 41 are trees in a standing forest. IAS 41 does not deal with the processing of agricultural produce after harvest. After the standing timber trees have been harvested (felling), timber is accounted for in accordance with IAS 2 *Inventories*. A biological asset is measured at each balance sheet date at its fair value less costs to sell, unless the fair value cannot be measured reliably, in which case, the biological asset is measured at its cost less any accumulated depletion and any accumulated impairment losses.

IAS 1 *Presentation of Financial Statements* requires biological assets to be presented separately on the face of an entity's balance sheet. IFRS requires the assets of timberland operations as presented on the balance sheet to be separated between timber and bare land and improvements (roads and bridges) as each falls under a different Standard (asset componentization). IAS 41 requires that "a gain or loss arising on initial recognition of a biological asset at fair value less costs to sell and from a change in fair value less costs to sell of a biological asset shall be included in profit or loss for the period in which it arises." IAS 41 also requires that gains and losses arising on initial recognition of agricultural produce at fair value less costs to sell (e.g., felled trees) shall be included in profit or loss for the period in which it arises.

EXERCISE 11-11 (Continued)

(e) (Continued)

With respect to asset retirement obligations (ARO) and decommissioning costs, under Canadian ASPE (*CICA Handbook* Section 3110 Asset Retirement Obligations), only the cost of legal obligations related to site restoration and asset retirement is capitalized. Changes in the estimate of the cost are also capitalized in the asset. IFRS does not have a direct equivalent to CICA 3110 Asset retirement obligations (ARO's), but these obligations — as well as other kinds of environmental liabilities — fall within the scope of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. The cost of legal and constructive obligations related to asset retirement is capitalized, as measured under IAS 37. However, increases in the cost of the obligation related to the production of inventory are specifically excluded (significant difference from Canadian ASPE).

EXERCISE 11-12 (10-15 minutes)

(a)

Inventory	970,200	
Accumulated Depletion		970,200

Depletion cost per barrel =

$$\frac{\$5,000,000 + \$6,250,000 + \$300,000}{250,000 \text{ barrels}} = \underline{\$46.20}$$

$$\text{Total depletion cost} = \$46.20 \times 21,000 = \underline{\$970,200}$$

Note: The product cost would also include the annual rental of \$275,000 (a period cost) and the 5% premium.

(b)

Oil Property	11,550,000	
Cash		11,250,000
Liability for Site Restoration		300,000
(\$5,000,000 + \$6,250,000 + \$300,000)		
Inventory	364,250	
Cash		364,250
(\$275,000 + [5% X \$85 X 21,000 barrels])		

EXERCISE 11-13 (15-20 minutes)

- (a) Depletion base:
 $\$850,000 + \$170,000 + \$40,000^* - \$100,000^{**} = \$960,000$

*The \$40,000 should be depleted because it is an asset retirement obligation.

**The value of the land should be capitalized as a separate asset component and not depleted.

Depletion rate: $\$960,000 \div 12,000,000 = \$0.08/\text{unit}$

- (b) Total depletion amount - 2014:
 $= \$0.08/\text{unit} \times 2,500,000 \text{ units extracted} = \$200,000$

Inventory.....	200,000	
Accumulated Depletion		200,000

- (c) Depletion in cost of goods sold - 2014:
 $= \$0.08/\text{unit} \times 2,200,000 \text{ units sold} = \$176,000$

Cost of Goods Sold.....	176,000	
Inventory.....		176,000

EXERCISE 11-14 (10-15 minutes)

(a) No correcting entry is necessary because changes in estimate are handled in the current and prospective periods.

(b) Original annual charge: $(\$56,000 - \$4,000) \div 8 = \$6,500$

Revised annual charge:

Carrying amount as of 1/1/2014 $[\$56,000 - (\$6,500 \times 5)] =$
 $= \$23,500$

Remaining useful life = 5 years (10 years – 5 years)

Revised residual value = \$4,500

$(\$23,500 - \$4,500) \div 5 = \$3,800$

Depreciation Expense	3,800	
Accumulated Depreciation—		
Equipment		3,800

(c) Revised annual charge:

Old depreciation rate = $(100\% \div 8) \times 2 = 25\%$

Carrying amount as of 1/1/2014 =

$= [\$56,000 \times (1 - 25\%)^5] = \$13,289$

Remaining useful life = 5 years

Revised depreciation rate = $(100\% \div 5) \times 2 = 40\%$

$\$13,289 \times 40\% = \$5,316$

Depreciation Expense	5,316	
Accumulated Depreciation—		
Equipment		5,316

EXERCISE 11-15 (20-25 minutes)

- (a) 1986-1995: $(\$1,800,000 - \$400,000) \div 40 = \$35,000/\text{yr.}$
- (b) 1996-2013:
 Building $(\$1,800,000 - \$400,000) \div 40 = \$35,000/\text{yr.}$
 Addition $(\$750,000 - \$150,000) \div 30 = \underline{\underline{\$20,000/\text{yr.}}}$
 $\underline{\underline{\$55,000/\text{yr.}}}$
- (c) No entry required because changes in estimate are handled in the current and prospective periods.

(d) Revised annual depreciation

Building:

Carrying amount: $(\$1,800,000 - \$980,000^*)$	\$820,000
Remaining useful life	<u>2 years</u>
Annual depreciation	<u>\$410,000</u>

Addition:

Carrying amount: $(\$750,000 - \$360,000^{**})$	\$390,000
Remaining useful life	<u>2 years</u>
Annual depreciation	<u>\$195,000</u>

$$*\$35,000 \times 28 \text{ years} = \$980,000$$

$$**\$20,000 \times 18 \text{ years} = \$360,000$$

Note: 30 years total useful life; 28 years have lapsed so the unamortized balance is charged off over the two years of remaining expected useful life. Despite the amount, this is treated prospectively.

Annual depreciation expense:

$$\text{Building } (\$410,000 + \$195,000) = \$605,000$$

EXERCISE 11-15 (Continued)

- (e) The original useful life estimate would have been management's best estimate based on the information that was available. However, an investor who purchased shares in Lincoln in 2013 would have based his or her investment decision on financial statements that show annual building depreciation expense of \$55,000/yr., when annual building depreciation expense would have been \$76,667/yr. $[(\$1,800,000 - \$400,000) \div 30 + (\$750,000 - \$150,000) \div 20]$ based on an original useful life of 30 years. Annual building depreciation expense of \$76,667/yr. for 28 years would have amounted to \$2,146,676 in accumulated depreciation at end of 2013, whereas the financial statements at end of 2013 reported accumulated depreciation of \$1,540,000. Also, the investor would have invested based on the information that the building would be useful for another 12 years (until 2025), although Lincoln will likely need to invest in a new building within 2 years, if the company intends to occupy a building within the same district. The investor should also be concerned that the building should be tested for impairment, since the value of the building on the balance sheet is likely overstated (it is based on an original useful life of 40 years), and there are now only 2 years of useful life remaining. Review of asset useful life at least at each year end helps to ensure that financial statements are prepared based on the most relevant information available.

EXERCISE 11-16 (15-20 minutes)

(a) $\$2,800,000 \div 40 = \$70,000$

(b)	Loss on Disposal of Buildings.....	95,000	
	Accumulated Depreciation—Buildings		
	(\$190,000 X 20/40)	95,000	
	Buildings		190,000
	Buildings*	370,000	
	Cash.....		370,000

*Componentized asset would be capitalized separately from the building if it had a different pattern of expected benefits or a different useful life. In this example, it is assumed, in the absence of additional information that the remaining useful life of the roof is the same as the building's remaining useful life, and that straight-line depreciation is appropriate.

The most appropriate entry (and as required under IFRS), as shown is to remove the old roof and record a loss on disposal. If the original cost is not known it would have to be estimated.

An alternative that exists under Canadian ASPE would be to debit Accumulated Depreciation – Buildings on the theory that the replacement extends the useful life of the building. The entry in this case would be as follows:

Accumulated Depreciation—Buildings .	370,000	
Cash.....		370,000

As indicated, this approach does not seem as appropriate as the first approach and does not provide for asset componentization.

(c) No entry necessary.

EXERCISE 11-16 (Continued)

(d) (Assume the cost of old roof is removed)

Building (\$2,800,000 – \$190,000 + \$370,000)	\$2,980,000
Accumulated Depreciation (\$70,000 X 20 – \$95,000)	<u>1,305,000</u>
	1,675,000
Remaining useful life	<u>25 years</u>
Depreciation—2014 (\$1,675,000 , 25)	<u>\$ 67,000</u>

OR

(Assume the cost of new roof is debited to
accumulated depreciation - buildings)

Carrying amount of building prior to the
replacement of roof

\$2,800,000 – (\$70,000 X 20) =	\$1,400,000
Cost of new roof	<u>370,000</u>
	\$1,770,000
Remaining useful life	<u>25 years</u>
Depreciation—2014 (\$1,770,000 , 25)	<u>\$ 70,800</u>

EXERCISE 11-17 (20-25 minutes)

(a)	December 31, 2014	
	Loss on Impairment.....	270,000
	Accumulated Impairment	
	Losses—Equipment	270,000

The recoverability test indicates that impairment has occurred since the carrying amount (\$500,000) exceeds the undiscounted future net cash flows (\$300,000). The impairment loss is then calculated as follows:

Cost	\$900,000
Accumulated depreciation	<u>400,000</u>
Carrying amount	500,000
Fair value	<u>230,000</u>
Impairment loss	<u><u>\$270,000</u></u>

- (b)** It may be reported in the other expenses and losses section or it may be highlighted as an unusual item in a separate section, as part of income from continuing operations. It is not reported as an extraordinary item.
- (c)** No entry necessary. Under the Cost Recovery Impairment Model, recovery of any impairment loss is not permitted for assets held for use or to be disposed of other than by sale.
- (d)** No entry necessary. The recoverability test indicates that impairment has not occurred since the carrying amount (\$500,000) is less than the undiscounted future net cash flows (\$510,000).

EXERCISE 11-17 (Continued)

- (e) The recoverability test indicates that impairment has occurred since the carrying amount (\$500,000) exceeds the undiscounted future net cash flows of \$450,000 (\$45,000 X 10 years).

Since fair value is not available, present value of the future net cash flows is used to calculate the impairment loss:

Cost	\$900,000
Accumulated depreciation	<u>400,000</u>
Carrying amount	500,000
Fair value*	<u>276,506</u>
Impairment loss	<u>\$223,494</u>

*Fair value = PV of annuity (\$45,000, n = 10 years, i = 10%) =
\$45,000 X 6.14457 = \$276,506

Using Excel:

Payments	\$45,000
Interest rate	10%
Periods	10
Future value	0
Type	0

Present value = \$276,506

December 31, 2015

Loss on Impairment.....	223,494
Accumulated Impairment	
Losses—Equipment	223,494

- (f) The Cost Recovery Impairment Model uses undiscounted future net cash flows in its recoverability test because the recoverability test assesses recoverability of cost. The asset's original cost is compared to undiscounted future net cash flows generated from use of the asset in future periods.

EXERCISE 11-18 (10-15 minutes)

When the recoverable amount of an individual asset cannot be determined, the asset is identified with a cash-generating unit (CGU), and the CGU's cash flows are tested for impairment. An individual asset is identified with a CGU, only when it does not generate cash inflows that are largely independent of cash flows from other assets or groups of assets, or when its fair value less selling costs is not considered representative of its value in use. The allocation of assets to CGU's often involves professional judgement.

The recoverable amount of a CGU, like the recoverable amount of an individual asset, is the higher of its value in use and fair value less costs of disposal (or fair value less costs to sell). Because the recoverable amount is compared with the CGU's carrying amount to determine if there is an impairment loss, it is reasonable to include the same assets in both measures.

Therefore the carrying amount of a CGU includes the carrying amount of only those assets that are used to generate the relevant stream of cash flows. These assets can be assets that are directly involved in the CGU, or assets that can be allocated to the CGU on a reasonable and consistent basis. Where liabilities are needed to calculate the recoverable amount, they are also deducted in determining the carrying amount of the CGU.

The road system's fair value less costs of disposal is almost negligible; certainly far less than its value in use. Because its recoverable amount cannot be determined independently, the road system is assigned to the smallest identifiable group of assets that generates independent cash inflows. The road system's CGU likely includes the mineral deposit and any other site-specific assets that do not generate independent cash inflows. The CGU's recoverable amount is the higher of its value in use and fair value less costs of disposal.

EXERCISE 11-19 (20-25 minutes)

(a)

Under IFRS, the recoverable amount of the cash-generating unit (CGU) is the higher of (1) value in use and (2) fair value less costs to sell. The recoverable amount of the CGU is \$108,000, which is lower than the carrying amount of the CGU (\$120,000), therefore the CGU is impaired. The impairment loss is \$12,000 (\$120,000 - \$108,000).

The impairment loss is allocated to the individual assets in the unit, but no individual asset is reduced to below the highest of (1) its value in use, (2) its fair value less costs to sell, or (3) zero.

Allocation of impairment loss to assets in cash-generating unit (CGU):

	Carrying Amount (before impairment)	Proportion	Loss Allocation	Carrying Amount (after impairment)
Land	\$25,000	25/120	\$2,500	\$22,500
Building	50,000	50/120	5,000	45,000
Equipment	30,000	30/120	3,000	27,000
Trucks	15,000	15/120	1,500	13,500
	<u>\$120,000</u>		<u>\$12,000</u>	<u>\$108,000</u>

The journal entry to recognize the impairment loss is:

Loss on Impairment.....	12,000
Land	2,500
Accumulated Impairment Losses—	
Buildings	5,000
Accumulated Impairment Losses—	
Equipment.....	3,000
Accumulated Impairment Losses—	
Trucks.....	1,500

EXERCISE 11-19 (Continued)

(b)

Since the recoverable amount of the building is determined to be \$46,000, the building cannot be reduced to below \$46,000 (note that from part (a), a true proportionate allocation would result in building carrying amount of less than \$46,000).

Allocation of impairment loss to assets in cash-generating unit (CGU):

	Carrying Amount (before <u>impairment</u>)	<u>Proportion</u>	<u>Loss Allocation</u>	Carrying Amount (after <u>impairment</u>)
Land	\$25,000	*25/70	**\$2,857	\$22,143
Buildings	50,000		4,000	46,000
Equipment	30,000	30/70	3,428	26,572
Trucks	<u>15,000</u>	15/70	<u>1,715</u>	<u>13,285</u>
	<u>\$120,000</u>		<u>\$12,000</u>	<u>\$108,000</u>

*Allocation base = \$25,000 + \$30,000 + \$15,000 = \$70,000

**Impairment loss to allocate = \$12,000 total – \$4,000 allocated to buildings = \$8,000; \$8,000 impairment loss to allocate X 25/70 = \$2,857 allocated to land

The journal entry to recognize the impairment loss is:

Loss on Impairment.....	12,000
Land	2,857
Accumulated Impairment Losses—	
Buildings	4,000
Accumulated Impairment Losses—	
Equipment.....	3,428
Accumulated Impairment Losses—	
Trucks	1,715

EXERCISE 11-19 (Continued)

(c)

Under ASPE, the asset group is impaired if its undiscounted future net cash flows are less than its carrying amount. The undiscounted future net cash flows are \$144,000, which is higher than the asset group's carrying amount of \$120,000. Therefore the asset group is not impaired and no entry is necessary.

EXERCISE 11-20 (20-25 minutes)

(a) Cost Recovery Impairment Model

(1)	December 31, 2014	
	Loss on Impairment.....	1,800,000
	Accumulated Impairment	
	Losses—Equipment	1,800,000

The recoverability test indicates that impairment has occurred since the carrying amount exceeds the undiscounted future net cash flows. The impairment loss is calculated as follows:

Cost	\$9,000,000
Accumulated depreciation	<u>1,000,000</u>
Carrying amount	8,000,000
Fair value	<u>6,200,000</u>
Impairment loss	<u>\$1,800,000</u>

(2)	December 31, 2015	
	Depreciation Expense.....	1,550,000
	Accumulated Depreciation—	
	Equipment.....	1,550,000

New carrying amount	\$6,200,000
Useful life	<u>4 years</u>
Depreciation per year	<u>\$1,550,000</u>

(3) No entry necessary. Under the Cost Recovery Impairment Model, recovery of any impairment loss is not permitted for assets held for use or to be disposed of other than by sale.

EXERCISE 11-20 (Continued)

(b) Rational Entity Impairment Model

- (1) The asset's recoverable amount is \$6,350,000 (the higher of its value in use (i.e. discounted future net cash flows) (\$6,350,000) and its fair value less costs to sell (\$6,150,000)).

The impairment test indicates that impairment has occurred since the carrying amount exceeds the recoverable amount. The impairment loss is calculated as follows:

Cost	\$9,000,000
Accumulated depreciation	<u>1,000,000</u>
Carrying amount	8,000,000
Recoverable amount	<u>6,350,000</u>
Impairment loss	<u>\$1,650,000</u>

December 31, 2014

Loss on Impairment.....	1,650,000	
Accumulated Impairment		
Losses—Equipment		1,650,000

- (2) December 31, 2015

Depreciation Expense.....	1,587,500	
Accumulated Depreciation—		
Equipment.....		1,587,500

New carrying amount	\$6,350,000
Useful life	<u>4 years</u>
Depreciation per year	<u>\$1,587,500</u>

EXERCISE 11-20 (Continued)

(b) (Continued)

- (3) Under IAS 36, an impairment loss may be reversed, however the specific asset cannot be increased in value to more than what its carrying amount would have been, net of depreciation, if the original impairment loss had never been recognized.

December 31, 2014 pre-impairment loss carrying amount.....	\$8,000,000
2015 depreciation based on pre-impairment carrying amount (\$8,000,000 ÷ 4 years)	<u>2,000,000</u>
December 31, 2015 pre-impairment carrying amount..	<u>\$6,000,000</u>

The December 31, 2015 carrying amount would have been \$6,000,000 if the impairment had not occurred; this is the maximum carrying amount which can be reflected for the equipment in the December 31, 2015 balance sheet.

Actual December 31, 2014 carrying amount.....	\$6,350,000
Actual 2015 depreciation (based on impairment)(a)	<u>1,587,500</u>
Indicated December 31, 2015 carrying amount.....	4,762,500
December 31, 2015 pre-impairment carrying amount..	<u>6,000,000</u>
Recovery of previously recognized impairment (b)	<u>\$1,237,500</u>

Thus, the net effect on the 2015 net income (loss) is a net decrease of \$350,000 [= (a) – (b)]. The asset cannot be restored to its December 31, 2014 carrying amount of \$6,350,000 as this exceeds the carrying amount that would have existed at December 31, 2015 had the impairment in 2014 never been recognized.

December 31, 2015	
Accumulated Impairment Losses—	
Equipment.....	1,237,500
Recovery of Loss from Impairment	<u>1,237,500</u>

EXERCISE 11-20 (Continued)

- (c) The Cost Recovery Impairment Model compares the asset carrying amount with its undiscounted future net cash flows to determine if the asset is impaired. This recoverability test does not take into account the time value of money and delays recording of impairment loss until impairment conditions are very bad. As a result, the financial statements may not be as relevant or faithfully representative. The Cost Recovery Impairment Model also does not allow for later recovery of any impairment losses, which is not neutral.**

The Rational Entity Impairment Model better reflects the economic conditions underlying the asset's usefulness to the entity, by considering the asset's value in use (a discounted value) as well as its fair value less costs to sell, and by capturing both the declines and recoveries in value of the asset.

EXERCISE 11-21 (15-20 minutes)

(a) Cost Recovery Impairment Model

(1) Loss on Impairment.....	1,850,000	
Accumulated Impairment		
Losses—Equipment		1,850,000

Cost	\$9,000,000	
Accumulated depreciation	<u>1,000,000</u>	
Carrying amount	8,000,000	
Less: Fair value	(6,200,000)	
Plus: Costs of disposal	<u>50,000</u>	
Impairment loss	<u>\$1,850,000</u>	

Held for sale assets are valued
at fair value less costs to sell.

(2) No entry necessary. Depreciation not taken on assets held for sale.

(3) Accumulated Impairment Losses—		
Equipment.....	300,000	
Recovery of Loss from		
Impairment		300,000

Fair value	\$6,500,000	
Less: Costs of disposal	<u>50,000</u>	6,450,000
Carrying amount*		<u>6,150,000</u>
Recovery of loss from impairment		<u>\$300,000</u>
*($\$9,000,000 - \$1,000,000 - \$1,850,000$)		

(4) The equipment would be shown in a separate section of the statement of financial position as a non-current asset held for sale. It would be shown at the lower of its carrying amount and fair value less costs to sell.

EXERCISE 11-21 (Continued)

(b) Rational Entity Impairment Model

(1) Same as E11-21 (a).

(2) No entry necessary. Depreciation not taken on assets held for sale.

(3) Accumulated Impairment Losses—

Equipment.....	300,000	
Recovery of Loss from Impairment		300,000

Fair value	\$6,500,000	
Less: Costs of disposal	<u>50,000</u>	6,450,000
Carrying amount*		<u>6,150,000</u>
Recovery of impairment loss		<u>\$ 300,000</u>
*($\$9,000,000 - \$1,000,000 - \$1,850,000$)		

(4) The equipment would be shown in a separate section of the statement of financial position as a current asset held for sale. It would be shown at the lower of its carrying amount and its fair value less costs to sell.

EXERCISE 11-22 (20-25 minutes)

Old Machine

June 1, 2010	Purchase	\$31,800
	Freight	300
	Installation	<u>500</u>
	Total cost	<u>\$32,600</u>

Annual depreciation charge: $(\$32,600 - \$1,900) \div 10 = \$3,070$

On June 1, 2011, debit the old machine for the cost of the new part of \$1,980; the revised total cost is \$34,580 (\$32,600 + \$1,980); thus the revised annual depreciation charge is: $(\$34,580 - \$1,900 - \$3,070) \div 9 = \$3,290$.

Carrying amount, old machine, June 1, 2014:	
[$\$34,580 - \$3,070 - (\$3,290 \times 3)$]	\$21,640
Fair value	<u>19,000</u>
Loss on disposal	2,640
Costs of removal	<u>75</u>
Total loss	<u>\$ 2,715</u>

New Machine

Basis of new machine	
Cash paid ($\$35,000 - \$19,000$)	\$16,000
Fair market value of old machine	19,000
Installation cost	<u>1,300</u>
Total cost of new machine	<u>\$36,300</u>

Depreciation for the year beginning June 1, 2014
= $(\$36,300 - \$4,000) \div 10 = \$3,230$.

EXERCISE 11-23 (20-25 minutes)

(a) Situation 1

(1) December 31, 2014

Depreciation Expense.....	18,000
Accumulated Depreciation – Equipment.....	18,000
(\$100,000 – \$10,000) ÷ 5 years	

The equipment is reported on the statement of financial position at a carrying amount of \$82,000 (\$100,000 less accumulated depreciation of \$18,000).

(2) December 31, 2015

Depreciation Expense.....	18,000
Accumulated Depreciation – Equipment.....	18,000
(\$100,000 – \$10,000) ÷ 5 years	

The equipment is reported on the statement of financial position at a carrying amount of \$64,000 (\$100,000 less accumulated depreciation of \$36,000).

(3) March 31, 2016

Depreciation Expense.....	4,500
Accumulated Depreciation – Equipment.....	4,500
(\$100,000 – \$10,000) ÷ 5 years X 3/12	
Cash.....	62,000
Accumulated Depreciation – Equipment	40,500
*Gain on Disposal of Equipment.....	2,500
Equipment	100,000

*Per IAS 16, the gain or loss on disposal (the difference between the carrying amount and the proceeds on disposal) is reported on the income statement. Any amount remaining in the Revaluation Surplus account would be transferred directly to retained earnings.

EXERCISE 11-23 (Continued)

(b) Situation 2

(1) December 31, 2014

Depreciation Expense	18,000	
Accumulated Depreciation – Equipment.....		18,000
(\$100,000 – \$10,000) ÷ 5 years		
Accumulated Depreciation – Equipment....	18,000	
Equipment.....		18,000
Equipment	7,000	
Revaluation Surplus (OCI).....		7,000

The equipment is reported on the statement of financial position at a carrying amount of \$89,000 (gross amount of \$89,000 less accumulated depreciation of \$0).

Note: This is a two step process. First, depreciation is recorded for the period according to normal depreciation principles. Second, the asset revaluation is recorded. Using the elimination method, accumulated depreciation is eliminated against the asset account just prior to revaluation of the asset to fair value.

(2) December 31, 2015

Depreciation Expense.....	19,500	
Accumulated Depreciation – Equipment.....		19,500
(\$89,000 – \$11,000) ÷ 4 years		

The equipment is reported on the statement of financial position at a carrying amount of \$69,500 (\$89,000 less accumulated depreciation of \$19,500).

EXERCISE 11-23 (Continued)

(3) March 31, 2016

Depreciation Expense	4,875	
Accumulated Depreciation - Equipment		4,875
(\$89,000 – \$11,000) ÷ 4 years X 3/12		
 Cash	62,000	
Accumulated Depreciation – Equipment.....	24,375	
Loss on Disposal of Equipment*	2,625	
Equipment.....		89,000

***Per IAS 16, the gain or loss on disposal (the difference between the carrying amount and the proceeds on disposal) is reported on the income statement. The remaining balance in the Revaluation Surplus account is now transferred directly to Retained Earnings:**

Debit:	AOCI	7,000	
Credit:	Retained Earnings		7,000

EXERCISE 11-23 (Continued)

c) Situation 2

(1) December 31, 2014

Depreciation Expense	18,000
Accumulated Depreciation – Equipment.....	18,000
(\$100,000 – \$10,000) ÷ 5 years	

	Before revaluation		Proportional after revaluation
Equipment	\$100,000	x 89/82	\$108,537
Acc. Dep'n.	18,000	x 89/82	19,537
Carrying amount	<u>\$ 82,000</u>	x 89/82	<u>\$ 89,000</u>

Equipment	8,537
Accumulated Depreciation - Equipment	1,537
Revaluation Surplus (OCI).....	7,000

The equipment is reported on the statement of financial position at a carrying amount of \$89,000 (gross amount of \$108,537 less accumulated depreciation of \$19,537).

Note: This is a two step process. First, depreciation is recorded for the period according to normal depreciation principles. Second, the asset revaluation is recorded. Using the proportional method, both the asset account and accumulated depreciation are adjusted so that the net carrying amount is equal to the new valuation.

(2) December 31, 2015

Depreciation Expense.....	19,500
Accumulated Depreciation – Equipment.....	19,500
(\$89,000 – \$11,000) ÷ 4 years	

EXERCISE 11-23 (Continued)

The equipment is reported on the statement of financial position at a carrying amount of \$69,500 (\$108,537 less accumulated depreciation of \$39,037).

(3) March 31, 2016

Depreciation Expense	4,875	
Accumulated Depreciation -		
Equipment		4,875
(\$89,000 – \$11,000) ÷ 4 years X 3/12		
Cash	62,000	
Accumulated Depreciation – Equipment.....	43,912	
Loss on Disposal of Equipment*	2,625	
Equipment.....		108,537

*Per IAS 16, the gain or loss on disposal (the difference between the carrying amount and the proceeds on disposal) is reported on the income statement. The remaining balance in the Revaluation Surplus account is transferred directly to Retained Earnings:

Debit:	AOCI	7,000	
Credit:	Retained Earnings		7,000

EXERCISE 11-24 (10-15 minutes)

Situation 1

Depreciation Expense.....	2,700	
Accumulated Depreciation—		
Equipment		2,700
(\$120,000 – \$12,000) ÷ 10 X 3/12 = \$2,700		
Cash	28,000	
Loss on Disposal of Equipment.....	13,700	
Accumulated Depreciation—Equipment		
(\$75,600 + \$2,700).....	78,300	
Equipment		120,000

Situation 2

Depreciation Expense.....	1,750	
Accumulated Depreciation—		
Machinery		1,750
(\$38,000 – \$2,000) ÷ 12 X 7/12 = \$1,750		
Cash	10,000	
Loss on Disposal of Machinery	2,250	
Accumulated Depreciation—Machinery		
(\$24,000* + \$1,750)	25,750	
Machinery		38,000
*Accumulated depreciation to December 31, 2013 is (\$38,000 – \$2,000) ÷ 12 X 8 yrs = \$24,000		

Situation 3

Cash	5,200	
Accumulated Depreciation—Office		
Equipment.....	8,500	
Office Equipment		12,000
Gain on Disposal of Equipment.....		1,700

EXERCISE 11-25 (20-25 minutes)

(a) Depreciation Expense (8/12 X \$60,000) ..	40,000	
Accumulated Depreciation—		
Machinery		40,000

Loss on Disposal of Machinery**	470,000	
(\$1,300,000 – \$400,000 – \$430,000)		
Cash	430,000	
Accumulated Depreciation—		
Machinery	400,000*	
Machinery		1,300,000

***(\$360,000 + \$40,000)**

**** Under both ASPE and IFRS, the loss might be classified as unusual, and would be included in profit or loss for the period.**

(b) Depreciation Expense (3/12 X \$60,000) ..	15,000	
Accumulated Depreciation—		
Machinery		15,000

Cash	1,040,000	
Accumulated Depreciation—		
Machinery	375,000	
(\$360,000 + \$15,000)		
Machinery		1,300,000
Gain on Sale of Machinery		115,000*
*(\$1,040,000 – \$1,300,000 – \$375,000)		

EXERCISE 11-25 (Continued)

(c) Depreciation Expense (7/12 X \$60,000) ..	35,000	
Accumulated Depreciation—		
Machinery		35,000
Contribution Expenses	1,100,000	
Accumulated Depreciation—		
Machinery	395,000	
(\$360,000 + \$35,000)		
Machinery		1,300,000
Gain on Disposal of Machinery		195,000*
*(\$1,100,000 – \$1,300,000 – \$395,000)		

EXERCISE 11-26 (10-15 minutes)

(a)

April 1	Cash	460,000	
	Accumulated Depreciation—		
	Buildings.....	165,000	
	Land		60,000
	Buildings.....		280,000
	Gain on Disposal of		
	Land and Buildings.....		285,000
	$(\$280,000 - \$165,000 = \$115,000;$ $\$115,000 + \$60,000 = \$175,000;$ $\$460,000 - \$175,000 = \$285,000$ gain)		
Aug. 1	Land	160,000	
	Buildings.....	410,000	
	Cash		570,000

(b) Under both ASPE and IFRS, the gain might be classified as unusual, and would be included in profit or loss for the period.

(c)	Depreciation Expense.....	3,750 *	
	Accumulated Depreciation—		
	Buildings		3,750

* $(\$410,000 - \$230,000) / 20 \times 5/12$

EXERCISE 11-27 (15-25 minutes)

1. Asset turnover ratio:

$$\frac{\$3,374,463}{(\$1,071,348 + \$787,167) / 2} = 3.63 \text{ times}$$

2. Rate of return on assets:

$$\frac{\$66,234}{(\$1,071,348 + \$787,167) / 2} = 7.13\%$$

3. Profit margin on sales:

$$\frac{\$66,234}{\$3,374,463} = 1.96\%$$

- (b) The asset turnover ratio times the profit margin on sales provides the rate of return on assets, calculated for Trocchi Inc. as follows:

Profit margin				Return on
on sales	X	Asset Turnover		Assets
1.96%	X	3.63	=	7.11%

Note that the result of 7.11% would be identical to the rate of return on assets calculated in (b) above of 7.13%, if the ratios used in the (b) calculation had not been rounded to 2 decimal places.

- (c) The company has a low profit margin at 1.96% of revenues. The asset turnover shows that the company generates \$3.63 of revenue for each dollar of assets. The efficiencies in the use of assets to generate revenues combined with the profit margin provide a reasonable rate of return on dollars invested in assets of 7.13%. The conclusion that the ROI is reasonable must be tempered by an evaluation relative to other firms operating in the same industry as well as general economic conditions.

***EXERCISE 11-28 (10-15 minutes)**

$$(a) \quad \frac{(\$136,400 - \$14,200)}{6} = \$20,367/\text{year} \\ = \$20,367 \times 5/12 = \underline{\underline{\$8,486}}$$

2014 Depreciation — Straight line = \$8,486

$$(b) \quad \frac{(\$136,400 - \$14,200)}{18,000} = \$6.789/\text{hr.}$$

**2014 Depreciation — Machine Usage
= 800 X \$6.789 = \$5,431**

$$(c) \quad \text{Rate:} \\ \frac{100\%}{6} = 16.67\%; 16.67\% \times 2 = 33.33\%$$

2014: 33.33% X (\$136,400) X 5/12 = \$18,943

2015: 33.33% X (\$136,400 – \$18,943) = \$39,148

$$(d) \quad \textbf{2014: } (\$136,400) \times 25\% \times 1/2 = \underline{\underline{\$17,050}}$$

2015: (\$136,400 – \$17,050) X 25% = \$29,838

***EXERCISE 11-29 (15-20 minutes)**

(a)	(1)	(2)	(3)
Proceeds of sale	<u>\$132,700</u>	<u>\$51,000</u>	<u>\$22,000</u>
Cost	<u>129,500</u>	<u>129,500</u>	<u>129,500</u>
Capital gain (excess of proceeds over cost)	<u>\$3,200</u>	<u>\$0</u>	<u>\$0</u>
Beginning UCC	\$37,450	\$37,450	\$37,450
Disposal (lesser of cost and proceeds of sale)	<u>129,500</u>	<u>51,000</u>	<u>22,000</u>
UCC, before CCA	<u>(92,050)</u>	<u>(13,550)</u>	<u>15,450</u>
Recapture*	<u>\$92,050</u>	<u>\$13,550</u>	
Terminal loss**			<u>\$15,450</u>

***Recapture occurs if UCC has a negative balance.**

****Terminal loss occurs if a positive balance remains in the class after the appropriate reduction is made to the class from the disposal of the last asset.**

- (b) Laiken could reduce the taxes payable on recapture by reducing or not claiming CCA in the years prior to the disposal of the asset. In those years, the tax rate would be lower and the reduction of CCA would trigger taxes payable at lower tax rates than the tax rate in 2014 on the recapture. This must be balanced against consideration of the time value of money, in that an earlier claim for an expense may offset the difference in rates – and uncertainty as to future proceeds of sale would lead most companies to claim the CCA when the entitlement arises.**

***EXERCISE 11-30 (15-20 minutes)**

(a) Depreciation for financial reporting purposes:

2014: $\$31,000 \times 40\% = \$12,400$
 2015: $(\$31,000 - \$12,400) \times 40\% = \$7,440$
 2016: $(\$31,000 - \$12,400 - \$7,440) \times 40\% = \$4,464$

(b)

Class 10, 30%:	CCA	UCC
Beginning UCC, Jan. 1, 2014		\$0
Addition		<u>\$31,000</u>
UCC, before CCA		31,000
Less $\frac{1}{2}$ net addition		<u>(15,500)</u>
UCC, for CCA purposes		15,500
CCA, 30%	<u>\$4,650</u>	<u>(4,650)</u>
		10,850
Add back $\frac{1}{2}$ net additions		<u>15,500</u>
UCC, Dec. 31, 2014		<u>\$26,350</u>
UCC, Jan. 1, 2015		\$26,350
CCA, 30%	<u>\$7,905</u>	<u>(7,905)</u>
UCC, Dec. 31, 2015		<u>\$18,445</u>
UCC, Jan. 1, 2016		\$18,445
CCA, 30%	<u>\$5,534</u>	<u>(5,534)</u>
UCC, Dec. 31, 2016		<u>\$12,911</u>

(c) Depreciation deducted on financial statements for period

2014 – 2016: $(\$12,400 + \$7,440 + \$4,464) = \underline{\$24,304}$.

CCA deducted to determine taxable income for period

2014- 2016: $(\$4,650 + \$7,905 + \$5,534) = \underline{\$18,089}$.

Carrying amount of computer equipment on December 31, 2016 = $\$31,000 - \$24,304 = \underline{\$6,696}$.

Tax value of computer equipment on December 31, 2016 = $\$31,000 - \$18,089 = \underline{\$12,911}$.

TIME AND PURPOSE OF PROBLEMS

Problem 11-1 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to calculate depreciation expense using a number of different depreciation methods, as well as capital cost allowance. The problem is complicated because the proper cost of the machine to be depreciated must be determined. For example, purchase discounts and freight charges must be considered. In addition, the student is asked to select a depreciation method that will allocate less depreciation in the early years of the machine's life than in the later years and to discuss cash flow implications.

Problem 11-2 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to calculate depreciation expense using the following methods: straight-line, units-of-output, working hours, declining balance, and CCA. The student is also required to calculate the carrying amount under the five different methods. The problem is straightforward and provides an excellent review of the basic computational issues involving depreciation methods.

Problem 11-3 (Time 30-45 minutes)

Purpose—to provide the student with a problem where depreciation is taken on only half a year for assets acquired or disposed of during the current year. In addition, the student is required to record a number of accounting transactions during the year affecting the machinery account, such as exchanges, minor repairs, replacements, and rearrangement and reinstallation costs.

Problem 11-4 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to compute depreciation expense using a number of different depreciation methods and capital cost allowance. The student has to determine which method will result in the maximization of net income over a three-year period. An excellent problem for reviewing the fundamentals of depreciation accounting.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 11-5 (Time 30-45 minutes)

Purpose—to provide the student with an opportunity to calculate depreciation expense using a number of different depreciation methods. Before the proper depreciation expense can be calculated, the accounts must be corrected for a number of errors made by the company in its accounting for the assets. An excellent problem for reviewing the proper accounting for plant assets and related depreciation expense.

Problem 11-6 (Time 45-60 minutes)

Purpose—to provide the student with an opportunity to correct the improper accounting for trucks and determine the proper depreciation expense. The student is required to calculate separately the errors arising in determining or entering depreciation or in recording transactions affecting trucks.

Problem 11-7 (Time 60-70 minutes)

Purpose—to have the student demonstrate the ability to analyze the consequences of the selection of depreciation methods. The student is to determine the results of using different combinations of depreciation methods on net income, total assets, current ratio, long-term debt to total assets ratio, and rate of return on total assets. Then a recommendation must be made as to which combination satisfies various concerns of the shareholder. These concerns reflect contractual commitments with suppliers and a bank, bonus payment to an employee, and desire to make the business attractive to potential investors. The student is also required to discuss the ethical issues involved in selecting a depreciation method to satisfy user constraints.

Problem 11-8 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to analyze the components of a large asset and determine the appropriate depreciation method for each component. The student is required to calculate and record depreciation expense for each asset component.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 11-9 (Time 25-30 minutes)

Purpose—to provide the student with a problem involving the calculation of estimated depletion and depreciation costs associated with a tract of mineral land. The student must calculate depletion and depreciation on a units-of-production basis (tonnes mined). A portion of the cost of machinery associated with the product must be allocated over different periods. The depreciable cost base must also be calculated and includes future site restoration costs, development costs and exploration costs. The student may experience some difficulty with this problem.

Problem 11-10 (Time 25-30 minutes)

Purpose—to provide the student with a problem involving the proper accounting for depletion cost. This problem involves timber land for which a depletion charge must be calculated. In addition, a calculation of a loss that occurs because of volcanic activity must be determined.

Problem 11-11 (Time 25-35 minutes)

Purpose—to provide the student with a comprehensive problem related to property, plant, and equipment. The student must determine depreciable bases for assets, including capitalized interest, and prepare depreciation entries using various methods of depreciation.

Problem 11-12 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to analyze impairments for assets to be used and assets to be disposed of. Different situations involving plans for sale are considered.

Problem 11-13 (Time 35-40 minutes)

Purpose—to provide a problem involving the method of handling the disposition of certain properties. The dispositions include an expropriation, demolition, trade-in, contribution and sale to a shareholder. The problem therefore involves a number of situations and provides a good overview of the accounting treatment accorded property dispositions.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 11-14 (Time 45-60 minutes)

Purpose—to provide the student with an opportunity to solve a complex problem involving a number of plant assets. A number of depreciation calculations must be made, specifically straight-line, 150% declining balance and double declining balance. In addition, the cost of assets acquired is difficult to determine.

Problem 11-15 (Time 45-60 minutes)

Purpose—to provide the student with the opportunity to solve a complex problem involving three different situations. The student must determine the depreciation bases, including present value calculations, and prepare depreciation entries using straight-line and units of production methods for full periods and for partial periods, as well as revision of depreciation amounts. The student must also prepare entries for note payable accruals and payments.

*Problem 11-16 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to calculate capital cost allowance. An excellent problem for reviewing the fundamentals of capital cost allowance.

*Problem 11-17 (Time 25-35 minutes)

Purpose—to provide the student with a problem related to government assistance and its impact on depreciation. The student is required to account for government assistance under the cost reduction and deferred credit approaches. The tax value of the asset must also be calculated.

SOLUTIONS TO PROBLEMS

PROBLEM 11-1

(a) 1. Depreciation Base Calculation:

Purchase price	\$85,000
Less: Purchase discount (2%)	(1,700)
Freight-in	800
Installation	<u>3,800</u>
	87,900
Less: Residual value	<u>1,500</u>
Depreciation base	<u>\$86,400</u>

Straight line —2014: $(\$86,400 \div 8 \text{ years}) \times 8/12 = \$7,200$

2015: $(\$86,400 \div 8 \text{ years}) = \$10,800$

2. Double-declining balance for 2014:

$(\$87,900 \times 25\% \times 8/12) = \$14,650$

DDB for 2015: $(\$87,900 - \$14,650) \times 25\% = \$18,313$

***(b) CCA for 2014: $\$87,900 \times 25\% \times \frac{1}{2} = \$10,988$**

CCA for 2015: $(\$87,900 - \$10,988) \times 25\% = \$19,228$

(c) An activity method. These methods allocate the depreciation base based on actual usage of the asset over its estimated useful life measured, for example, in units of output. In years where production is low, depreciation expense will also be low and in years of high production, depreciation expense will be high. This will match the depreciation expense with the decline in benefits the equipment has to offer.

PROBLEM 11-1 (Continued)

If the asset benefits are actually delivered as the asset is used, this would be an appropriate basis for the depreciation calculations. An example of this is when equipment deteriorates through wear and tear associated with use. However, if the asset deteriorates on another basis, such as on the basis of time, this would not be an appropriate method. In this latter case, depreciation should be recognized equally over time (straight line method) even if the asset is not being used. The primary concern is not how the revenues are earned, but rather with the pattern in which the physical capacity, wear and tear, technical obsolescence, or legal life are used up as the asset is available to the entity.

PROBLEM 11-1 (Continued)

- (d) The selection of a depreciation method for financial reporting purposes has no impact on cash flows. Cash flows would be the same regardless of the depreciation method selected. Phoenix Corp. would therefore have the same amount of cash in order to repay its debt. If Phoenix's creditors use ratios as part of the debt agreements, the depreciation method that helps Phoenix meet its debt covenants would be preferable. For example, an activity method would yield a lower debt to total assets ratio in the early years since the asset's carrying amount would be higher compared to the company's debt. It would also produce a higher profit margin since the depreciation expense would be lower in the early years. Creditors however are usually not fooled by the selection of depreciation methods and would concentrate on the company's debt repayment ability as demonstrated by cash flows. Creditors would be aware of management's choice of depreciation method by reading the note to the financial statements on the topic of accounting policies.
- (e) The depreciation period ends when the asset is derecognized, or when it is classified as held for sale. Depreciation continues even if the asset is idle or has been taken out of service. In this case, the depreciation period ends on September 15, 2016, when the asset meets all criteria for classification as held for sale.

$$\text{DDB —2016: } (\$87,900 - \$14,650 - \$18,313) \times 25\% \times 8.5/12 = \$9,728$$

PROBLEM 11-2

(a) Depreciation Base Calculation:

Purchase price	\$77,000
Overhaul	5,200
Direct material	400
Direct labour	800
	<u>83,400</u>
Less: Residual value	<u>5,000</u>
Depreciation base	<u>\$78,400</u>

	Straight-line	Activity – based on output		Activity – based on input	
Year	Dep'n. expense	Units produced	Dep'n. expense	Hours of operation	Dep'n. expense
2011	5,880 ¹	110,000	7,183 ²	10,000	7,840 ³
2012	15,680	270,000	17,631	20,000	15,680
2013	15,680	264,000	17,239	20,000	15,680
2014	15,680	310,000	20,243	20,000	15,680
2015	15,680	134,000	8,750	18,000	14,112
2016	9,800	112,000	7,354	12,000	9,408
Total	<u>\$78,400</u>	<u>1,200,000</u>	<u>\$78,400</u>	<u>100,000</u>	<u>\$78,400</u>

	Declining Balance		C.C.A.	
Year	Dep'n. expense	Ending Carrying Amount	C.C.A	Ending U.C.C.
2011	12,510 ⁴	70,890	8,340 ⁵	75,060
2012	28,356	42,534	15,012	60,048
2013	17,014	25,520	12,010	48,038
2014	10,208	15,312	9,608	38,430
2015	6,125	9,187	7,686	30,744
2016	4,187	5,000	(see item 5)	
Total	<u>\$78,400</u>		<u>\$52,656</u>	

PROBLEM 11-2 (Continued)

1. Straight-line:

$\$78,400 \div 5 = \$15,680/\text{yr.}$

2011: $\$15,680 \times 4.5/12 = \$5,880$

2012-2015: $\$15,680/\text{yr.}$

2016: $\$15,680 \times 7.5/12 = \$9,800$

2. Units-of-output:

$\$78,400 \div 1,200,000 \text{ units} = \$0.0653/\text{unit}$

2011: $\$0.0653 \times 110,000 = \$7,183$

2012: $\$0.0653 \times 270,000 = \$17,631$

2013: $\$0.0653 \times 264,000 = \$17,239$

2014: $\$0.0653 \times 310,000 = \$20,243$

2015: $\$0.0653 \times 134,000 = \$8,750$

2016: $\$0.0653 \times 112,000 = \$7,354^*$

* rounded to bring carrying amount equal to residual value

3. Working hours:

$\$78,400 \div 100,000 \text{ hrs.} = \$0.784/\text{hr.}$

2011: $\$0.784 \times 10,000 = \$7,840$

2012: $\$0.784 \times 20,000 = \$15,680$

2013: $\$0.784 \times 20,000 = \$15,680$

2014: $\$0.784 \times 20,000 = \$15,680$

2015: $\$0.784 \times 18,000 = \$14,112$

2016: $\$0.784 \times 12,000 = \$9,408$

4. Double-declining balance:

2011: $\$83,400 \times 2/5 \times 4.5/12 = \$12,510$

2012: $(\$83,400 - \$12,510) \times 2/5 = \$28,356$

2013: $(\$70,890 - \$28,356) \times 2/5 = \$17,014$

2014: $(\$42,534 - \$17,014) \times 2/5 = \$10,208$

2015: $(\$25,520 - \$10,208) \times 2/5 = \$6,125$

2016: $(\$9,187 - \$5,000) = \$4,187$

to bring carrying amount equal to residual value

PROBLEM 11-2 (Continued)

***5. Capital cost allowance:**

2011: $\$83,400 \times 20\% \times 1/2 = \$8,340$

2012: $(\$83,400 - \$8,340) \times 20\% = \$15,012$

2013: $(\$75,060 - \$15,012) \times 20\% = \$12,010$

2014: $(\$60,048 - \$12,010) \times 20\% = \$9,608$

2015: $(\$48,038 - \$9,608) \times 20\% = \$7,686$

2016: no CCA is calculated in the last year because disposal is assumed. On disposal, if no other assets remain in the class, a terminal loss or recapture is triggered. If other assets remain in the class, the CCA continues as part of the class: $(\$38,430 - \$7,686) \times 20\% = \$6,149$

- (b)**
- 1. Straight-line = $\$83,400 - \$5,880 - (3 \times \$15,680) = \$30,480$**
 - 2. Activity method: output = $\$83,400 - \$7,183 - \$17,631 - \$17,239 - \$20,243 = \$21,104$**
 - 3. Activity method: input = $\$83,400 - \$7,840 - (3 \times \$15,680) = \$28,520$**
 - 4. Declining balance: $\$83,400 - \$12,510 - \$28,356 - \$17,014 - \$10,208 = \$15,312$**

(c) The asset's tax value on October 31, 2014 is \$38,430.

(d) If management determines before the end of useful life that the hours of operation or units produced do not correspond to the original estimates, then an adjustment to the original estimate or total hours of operation or units produced would be applied prospectively and a new depreciation rate would be calculated. If the discrepancy is not determined until the end of its useful life, then depreciation in the last year is adjusted to achieve carrying amount equal to residual value.

PROBLEM 11-3

(Note to instructor: All depreciation for the year is entered on December 31, therefore, none is entered at the time of disposal.)

(a) January 15		
Accumulated Depreciation—Machinery		
(\$9,600 X 10% x 7)	6,720	
Cash	600	
Loss on Disposal of Machinery	2,280	
Machinery		9,600
(Accumulated Depreciation $\frac{1}{2}$ yr. + 6 yrs. + $\frac{1}{2}$ yr. = 7 yrs.)		

February 27		
Machinery	12,500	
Accumulated Depreciation—Machinery		
(\$5,500 + \$5,740)	11,240	
Cash		9,000
Machinery (\$5,500 + \$8,200)		13,700
Gain on Disposal of Machinery		1,040
(Accumulated Depreciation: Machine #12—10 yrs.; \$5,500		
Machine #27— 6 yrs. + $\frac{1}{2}$ yr. + $\frac{1}{2}$ yr.;		
\$8,200 X 10% X 7 = \$5,740)		

April 7		
Machinery	940	
Cash		940

April 12		
Maintenance and Repairs Expense	720	
Cash		720

July 22		
Cash	3,100	
Accumulated Depreciation—Machinery*	7,440	
Gain on Disposal of Machinery		540
Machinery		10,000

PROBLEM 11-3 (Continued)

*Accumulated Depreciation

No. 25: $(1/2 + 7 + 1/2)/10 \times \$4,000 =$	\$3,200
No. 26: $(1/2 + 7 + 1/2)/10 \times \$3,200 =$	2,560
No. 41: $(1/2 + 5 + 1/2)/10 \times \$2,800 =$	<u>1,680</u>
	<u>\$7,440</u>

(b) Depreciation for the year:

On machinery in use all year:

Balance of Machinery Acc. 1/1/11		\$172,300
Deduct:		
Machine No. 12, fully depreciated	\$ 5,500	
Machine No. 38, scrapped	9,600	
Machine No. 27, traded in	8,200	
Machine No. 25, 26, 41 sold	<u>10,000</u>	<u>(33,300)</u>
In use all year		<u>\$139,000</u>

Depreciation expense = $\$139,000 \times 10\%$ \$13,900

On machinery in use part of year:

Machine No. 38, scrapped	\$ 9,600
Machine No. 27, traded in	8,200
Machine No. 25, 26, 41 sold	10,000
Machine No. 81, purchased	12,500
Elec. Control equip. purchased	<u>940</u>
Used part of year	<u>\$41,240</u>

Depreciation expense = $\$41,240 \times 10\% \times 1/2$ 2,062
Total depreciation expense \$15,962

December 31

Depreciation Expense	15,962	
Accumulated Depreciation—Machinery		15,962

PROBLEM 11-4

- (a) The straight-line method would provide the highest total net income for financial reporting over the three years, as it reports the lowest total depreciation expense. These computations are provided below.

Computations of depreciation expense and accumulated depreciation under various assumptions:

1. Straight-line:

$$\frac{\$1,100,000 - \$50,000}{5 \text{ years}} = \$210,000$$

Year	Depreciation Expense	Accumulated Depreciation
2012	\$210,000	<u>\$ 210,000</u>
2013	210,000	<u>\$ 420,000</u>
2014	<u>210,000</u>	<u>\$ 630,000</u>
	<u>\$630,000</u>	

2. Double-declining balance:

Year	Depreciation Expense		Accumulated Depreciation
2012	\$440,000	(40% X \$1,100,000)	<u>\$ 440,000</u>
2013	264,000	(40% X \$660,000)	<u>\$ 704,000</u>
2014	<u>158,400</u>	(40% X \$396,000)	<u>\$ 862,400</u>
	<u>\$862,400</u>		

PROBLEM 11-4 (Continued)

3. Units-of-output:

Year	Depreciation Expense		Accumulated Depreciation
2012	\$252,000	(\$21* X 12,000)	<u>\$ 252,000</u>
2013	231,000	(\$21 X 11,000)	<u>\$ 483,000</u>
2014	<u>210,000</u>	(\$21 X 10,000)	<u>\$ 693,000</u>
	<u>\$693,000</u>		

*\$1,050,000 ÷ 50,000 = \$21 per unit

(b) Capital cost allowance (CCA):

Year	CCA		UCC
2012	\$165,000	(\$1,100,000 X 30% X 1/2)	\$ 935,000
2013	280,500	(\$935,000 X 30%)	\$ 654,500
2014	<u>196,350</u>	(\$654,500 X 30%)	\$ 458,150
	<u>\$641,850</u>		

- (c) The units-of-output method would best reflect the benefits provided by the equipment. This method matches the expense to the output generated from the machine and to the revenue generated by the machine. Since the machine is used to manufacture machine tools, the depreciation of the machine would be a component of the product cost. For this purpose, the units-of-output would produce a cost pattern for the product that reflects the volume of tools produced and best reflects the contribution of the machine to the manufacture of the product.

PROBLEM 11-5

(a)	Depreciation Expense Accumulated Depreciation—Asset A $(\$46,000 - \$3,900) \div 10$	4,210 4,210
	Accumulated Depreciation—Asset A $(\$21,050 + \$4,210)$	25,260
	Loss on Disposal of Assets Asset A $(\\$46,000 - \\$16,500)$	4,240 29,500
(b)	Depreciation Expense Accumulated Depreciation—Asset B $(\$58,000 - \$4,450) \div 17,000 \times 3,200$	10,080 10,080
(c)	Depreciation Expense Accumulated Depreciation—Asset C $(\$68,000 - \$12,000 - \$8,000) \div 10$	4,800 4,800
(d)	Asset E Retained Earnings	31,000 31,000
	Depreciation Expense Accumulated Depreciation—Asset E $(\$31,000 - \$0) \times 20\%$	6,200 6,200
(e)	Depreciation Expense Accumulated Depreciation—Asset D $(\$73,000 - \$26,280) \times 20\%$	9,344 9,344

PROBLEM 11-6

	Per Company Books			As Adjusted		
	Trucks dr. (cr.)	Acc. Dep. - Trucks dr. (cr.)	Retained Earnings dr. (cr.)	Trucks dr. (cr.)	Acc. Dep. - Trucks dr. (cr.)	Retained Earnings dr. (cr.)
1/1/11 Balance	\$ 94,000	<u>\$ (30,200)</u>		<u>\$94,000</u>	<u>\$ (30,200)</u>	
7/1/11 Purchase Truck #5	15,000			34,000		
Trade Truck #3				(30,000)	9,000	\$ 2,000 ¹
12/31/11 Depreciation		<u>(20,300)</u>	<u>\$20,300</u>		<u>(19,200)</u>	<u>19,200</u> ²
12/31/11 Balances	<u>109,000</u>	<u>(50,500)</u>	<u>\$20,300</u>	<u>98,000</u>	<u>(40,400)</u>	<u>\$21,200</u> <u>\$ 900</u> <u>(1,100)</u>
1/1/12 Sale of Truck #1	(3,500)			(18,000)	14,400	\$ 100 ³
12/31/12 Depreciation		<u>(21,100)</u>	<u>\$21,100</u>		<u>(16,000)</u>	<u>16,000</u> ⁴
12/31/12 Balances	<u>105,500</u>	<u>(71,600)</u>	<u>\$21,100</u>	<u>80,000</u>	<u>(42,000)</u>	<u>\$16,100</u> <u>\$ (5,000)</u> <u>(5,100)</u>
7/1/13 Purchase of Truck #6	36,000			36,000		
7/1/13 Disposal of Truck #4	(2,500)		\$ (700)	(24,000)	14,400	\$ 6,400 ⁵
12/31/13 Depreciation		<u>(24,450)</u>	<u>24,450</u>		<u>(15,000)</u>	<u>15,000</u> ⁶
12/31/13 Balances	<u>139,000</u>	<u>(96,050)</u>	<u>\$23,750</u>	<u>92,000</u>	<u>(42,600)</u>	<u>\$21,400</u> <u>\$ (2,350)</u> <u>(9,450)</u>
12/31/14 Depreciation		<u>(27,800)</u>	<u>\$27,800</u>		<u>(14,000)</u>	<u>\$14,000</u> ⁷
12/31/14 Balances	<u>\$139,000</u>	<u>\$ (123,850)</u>	<u>\$27,800</u>	<u>\$92,000</u>	<u>\$ (56,600)</u>	<u>\$14,000</u> <u>\$ (13,800)</u> <u>\$ (13,800)</u>
Total understatement of income			<u>\$92,950</u>			<u>\$72,700</u> <u>\$ (20,250)</u>

PROBLEM 11-6 (Continued)

$$\begin{aligned} &^1 \text{Implied fair value of Truck \#3} \\ & \quad (\$34,000 - \$15,000) \qquad \qquad \qquad = \$19,000 \end{aligned}$$

$$\begin{aligned} & \text{Carrying amount of Truck \#3} \\ & \quad [\$30,000 - (\$30,000/5 \times 1 \frac{1}{2} \text{ yrs.})] \\ & \quad = \$30,000 - \$9,000 \qquad \qquad \qquad = \underline{\underline{\$21,000}} \\ & \quad \text{Loss on trade} \qquad \qquad \qquad \underline{\underline{\$2,000}} \end{aligned}$$

$$\begin{array}{rclcl} ^2 \text{Truck \#1:} & \$18,000/5 & = & \$3,600 \\ \text{Truck \#2:} & \$22,000/5 & = & 4,400 \\ \text{Truck \#3:} & \$30,000/5 \times \frac{1}{2} & = & 3,000 \\ \text{Truck \#4:} & \$24,000/5 & = & 4,800 \\ \text{Truck \#5:} & \$34,000/5 \times \frac{1}{2} & = & \underline{3,400} \\ \text{Total} & & & \underline{\underline{\$19,200}} \end{array}$$

$$\begin{aligned} &^3 \text{Carrying amount of Truck \#1} \\ & \quad [\$18,000 - (\$18,000/5 \times 4 \text{ yrs.})] \\ & \quad = \$18,000 - \$14,400 \qquad \qquad \qquad = \$3,600 \\ & \text{Cash received on sale} \qquad \qquad \qquad = \underline{\underline{\$3,500}} \\ & \quad \text{Loss on sale} \qquad \qquad \qquad \underline{\underline{\$100}} \end{aligned}$$

$$\begin{array}{rclcl} ^4 \text{Truck \#2:} & \$22,000/5 & = & \$4,400 \\ \text{Truck \#4:} & \$24,000/5 & = & 4,800 \\ \text{Truck \#5:} & \$34,000/5 & = & \underline{6,800} \\ \text{Total} & & & \underline{\underline{\$16,000}} \end{array}$$

$$\begin{aligned} &^5 \text{Carrying amount of Truck \#4} \\ & \quad [\$24,000 - (\$24,000/5 \times 3 \text{ yrs.})] \\ & \quad = \$24,000 - \$14,400 \qquad \qquad \qquad = \$9,600 \\ & \text{Cash received } (\$700 + \$2,500) \qquad \qquad \qquad = \underline{\underline{\$3,200}} \\ & \quad \text{Loss on disposal} \qquad \qquad \qquad \underline{\underline{\$6,400}} \end{aligned}$$

$$\begin{array}{rclcl} ^6 \text{Truck \#2:} & \$22,000/5 \times \frac{1}{2} & = & \$2,200 \\ \text{Truck \#4:} & \$24,000/5 \times \frac{1}{2} & = & 2,400 \\ \text{Truck \#5:} & \$34,000/5 & = & 6,800 \\ \text{Truck \#6:} & \$36,000/5 \times \frac{1}{2} & = & \underline{3,600} \\ \text{Total} & & & \underline{\underline{\$15,000}} \end{array}$$

PROBLEM 11-6 (Continued)

⁷ Truck #2:	(fully depr.)	=	\$	0
Truck #5:	\$34,000/5	=		6,800
Truck #6:	\$36,000/5	=		7,200
Total				<u>\$14,000</u>

(b) Compound journal entry Dec. 31, 2014:

Accumulated Depreciation - Trucks	67,250	
Trucks		47,000
Retained Earnings		6,450
Depreciation Expense		13,800
(\$27,800 – \$14,000)		

Summary of Adjustments:

	Per Books	As Adjusted	Adjustment Dr. or (Cr.)
Trucks	<u>\$139,000</u>	<u>\$92,000</u>	<u>\$(47,000)</u>
Accum. Depreciation	<u>\$123,850</u>	<u>\$56,600</u>	<u>\$ 67,250</u>
Prior Years' Income			
Retained Earnings, 2011	\$ 20,300	\$21,200	\$ 900
Retained Earnings, 2012	21,100	16,100	(5,000)
Retained Earnings, 2013	<u>23,750</u>	<u>21,400</u>	<u>(2,350)</u>
Totals	<u>\$ 65,150</u>	<u>\$58,700</u>	<u>\$ (6,450)</u>
Depr. Expense, 2014	<u>\$ 27,800</u>	<u>\$14,000</u>	<u>\$(13,800)</u>

PROBLEM 11-7

(a)

To: Linda Monkland, Shareholder of Monkland Ltd.

From: Your name, Accountant

Date: June 30, 2014

Subject: Recommendation of accounting methods

This memo addresses the concerns and constraints you raised and recommends depreciation methods for the building and equipment. Detailed calculations have been provided.

Aside from the principle in the accounting standard that underlies the accounting policy choice, the following calculations need to be made so the consequences of the methods may be assessed.

Depreciation charges for 2014 under alternative methods:

	<u>Double- Declining Method</u>	<u>Straight- Line Method</u>	<u>Activity Method</u>
Building:			
DDB: $\$90,000 \times 2/25$	7,200 ⁽¹⁾		
SL: $(\$90,000 - \$15,000)/25$		3,000 ⁽²⁾	
Equipment:			
DDB: $\$50,000 \times 2/5$	20,000 ⁽³⁾		
SL: $(\$50,000 - \$5,000) / 5$		9,000 ⁽⁴⁾	
UOP: $(\$50,000 - \$5,000)$ X 2,400/15,000			7,200 ⁽⁵⁾

PROBLEM 11-7 (Continued)

Method Combinations	Depr. Buildings	Depr. Equipment	Total Expense	Net Income	Total Assets	Current Ratio	LTD/TA	Net Inc./TA
1 and 3	\$ 7,200	\$20,000	\$27,200	\$2,800	\$252,800	2.5	47.5%	1.1%
1 and 4	7,200	9,000	16,200	13,800	263,800	2.5	45.5%	5.2%
1 and 5	7,200	7,200	14,400	15,600	265,600	2.5	45.2%	5.9%
2 and 3	3,000	20,000	23,000	7,000	257,000	2.5	46.7%	2.7%
2 and 4	3,000	9,000	12,000	18,000	268,000	2.5	44.8%	6.7%
2 and 5	3,000	7,200	10,200	19,800	269,800	2.5	44.5%	7.3%

Combinations reflect number code on previous page

Net income = \$30,000 – total depreciation expense

Total assets = \$280,000 – Accumulated Depreciation (the total expense for year ended 2014)

Current ratio is not affected by the consequences of the depreciation method = 100,000 / 40,000 = 2.5:1

Long-term debt to total assets = \$120,000/ Total asset amount calculated

Income divided by total assets = rate of return on total assets

= Income calculated / Total assets calculated

PROBLEM 11-7 (Continued)

The consequences of this analysis are that the following combination of methods meets your concerns for 2014.

- 1. Current ratio greater than 2. All methods satisfy this concern as the depreciation method will affect neither current assets nor current liabilities.**
- 2. Long-term debt to total asset ratio less than 46%. The combinations of methods meeting this criterion (using code numbers) are:**
 - 1 and 4**
 - 1 and 5**
 - 2 and 4**
 - 2 and 5**
- 3. Net income less than \$14,000. The combinations of methods meeting this criterion (using code numbers) are:**
 - 1 and 3**
 - 1 and 4**
 - 2 and 3**
- 4. Rate of return on total assets of at least 5% is achieved in the following combinations:**
 - 1 and 4**
 - 1 and 5**
 - 2 and 4**
 - 2 and 5**

PROBLEM 11-7 (Continued)

Recommendation: Use the double-declining balance method for the building (1) and the straight-line method for the equipment (4). Only this combination satisfactorily meets all your concerns. All methods examined are permitted under both ASPE and IFRS.

I hope that these explanations and recommendations help clarify the concerns and issues you raised for Monkland Ltd.

- (b) According to the GAAP accounting standards, the depreciation method should reflect the pattern in which the asset benefits are expected to be used up by the entity. Because the building is likely to be useful to the company on the basis of time (an equal charge each year), the double-declining balance method that has higher charges in the early years may not be appropriate. In addition, if the equipment deteriorates with use, the straight-line method may not be appropriate.**

It is important to note that once a depreciation method is selected, the comparability (consistency) principle and ASPE/IFRS requirements for changes in accounting policies, will allow you to voluntarily change methods only if the new method results in reliable and more relevant financial information. This means that you may have to keep the depreciation method for several years, even after the importance of meeting analytical constraints passes and other reporting objectives take their place.

I would also like to point out that a longer-term analysis should be performed. Over several years, the impact of a double-declining method will change and may affect future years' constraints in a negative manner.

PROBLEM 11-7 (Continued)

In conclusion, I would like to point out that even though the constraints highlighted in the foregoing report are important, the depreciation methods selected should reflect the assets' underlying economic performance and the pattern in which the assets' benefits are expected to be used up by Monkland.

- (d) While all three depreciation methods are recognized by both ASPE (and IFRS), the depreciation methods selected should reflect the pattern in which the assets' benefits are expected to be used up by Monkland. By selecting the depreciation methods that satisfy the constraints of certain users, Monkland's financial statements may not be faithfully representative, neutral or free from bias.**

Because Monkland is a private company, fewer users rely on the company's financial reports. The major users identified and affected are the suppliers, the bank, the company's manager, and potential investors. These users could suffer financial losses if the statements are based only on shorter-term constraints, as Linda Monkland may be sacrificing users' needs and quality of earnings content (as discussed in Chapter 4), in order to achieve shorter-term constraints.

Linda Monkland is in a position to explain variation from the constraining ratios to each type of user, and may want to think about renegotiating the constraints so they are based on pre-depreciation numbers or results based on agreed upon depreciation policies.

PROBLEM 11-8

- (a) The ship consists of three major components, each with cost representing a significant portion of the total asset, and useful life, residual value, and pattern of providing economic benefits differing from the other major components.

Under IFRS, entities are required to recognize major components separately for the purpose of depreciation. For each component, the depreciation method should be the method that best reflects the pattern of economic benefits to be received from the component.

Because the pattern of benefits received from the engines varies with activity, the units of production method would be most appropriate for the engines. The double-declining balance method would be most appropriate for the hull. The straight-line method would be most appropriate for the body of the ship, with benefits to be received evenly over the life of the body.

- (b)

June 30, 2014

Ship Engines	5,850,000 *	
Ship Hull	3,350,000	
Ship Body	87,800,000	
Cash		97,000,000
*\$975,000 X 6		

PROBLEM 11-8 (Continued)

(c)

December 31, 2014

Depreciation expense	240,377	
Accumulated Depreciation –		240,377
Ship Engines		
$(\\$975,000 - \\$120,000) \times 6 \times 328,000 / 7,000,000$		

Depreciation expense	335,000	
Accumulated Depreciation –		335,000
Ship Hull		
$100\%/10 = 10\% \times 2 = 20\%$		
$(\\$3,350,000 \times 20\%) \times 6/12$		

Depreciation expense	2,410,000	
Accumulated Depreciation –		2,410,000
Ship Body		
$(\\$87.8 \text{ million} - \\$15.5 \text{ million}) / 15 \times 6/12$		

(e) Under ASPE, entities are also required to recognize separate components for the purpose of depreciation; however the practice has been not to recognize asset components to the same extent as under IFRS.

PROBLEM 11-9

(a) Estimated depletion:

Depletion Base	Estimated Yield	Estimated Depletion		
		Per Tonne	1 st & 11 th Yrs.	Each of Yrs. 2-10 Incl.
\$870,000*	120,000 tonnes	\$7.25	\$43,500**	\$87,000***

* (\$720,000 + \$126,400 + \$53,600 – \$30,000)

** (\$7.25 X 6,000)

*** (\$7.25 X 12,000)

Estimated depreciation:

Asset	Cost	Per tonne mined	1 st Yr.	Yrs. 2-5	6 th Yr.	Yrs. 7- 10	11 th Yr.
tonnes mined			6,000	12,000	12,000	12,000	6,000
Building	\$36,000	\$.30*	\$1,800	\$3,600	\$3,600	\$3,600	\$1,800
Machinery (1/2)	30,000	.25**	1,500	3,000	3,000	3,000	1,500
Machinery (1/2)	30,000	.50***	3,000	6,000	3,000	0	0

* \$36,000 , 120,000 = \$.30

** \$30,000 , 120,000 = \$.25

*** \$30,000 , (120,000 X 1/2) = \$.50

PROBLEM 11-9 (Continued)

(b) Mineral Resources	900,000*	
Building	36,000	
Machinery	60,000	
Exploration Expense	83,000	
Cash		1,025,400
Asset Retirement Obligation		53,600

* (\$720,000 + \$126,400 + \$53,600)

Depletion: $\$7.25 \times 5,000 \text{ tonnes} = \underline{\underline{\$36,250}}$

Depreciation:	Building	$\$.30 \times 5,000 =$	\$1,500
	Machinery	$\$.25 \times 5,000 =$	1,250
	Machinery	$\$.50 \times 5,000 =$	<u>2,500</u>
	Total depreciation		<u><u>\$5,250</u></u>

Inventory	36,250	
Inventory (re: Depreciation Expense, Building)	1,500	
Inventory (re: Depreciation Expense, Machinery)	3,750	
Accumulated Depletion - Mineral Resources		36,250
Accumulated Depreciation– Buildings		1,500
Accumulated Depreciation– Machinery		3,750

PROBLEM 11-9 (Continued)

(c) Depletion:	\$7.25 X 4,500 tonnes =	\$32,625
Depreciation:	Building \$.30 X 4,500 =	\$1,350
	Machinery \$.25 X 4,500 =	1,125
	Machinery \$.50 X 4,500 =	<u>2,250</u>
	Total depreciation	<u>\$4,725</u>
Cost of goods sold		<u><u>\$37,350</u></u>

The depletion would be included as a product cost and would be transferred to cost of goods sold as the minerals are sold. The depreciation is included in cost of goods sold as it forms part of the product cost under absorption costing. For all the tonnes mined that were sold, all of the above costs would be included on the income statement. The first year income statement would also show the exploration costs of \$83,000.

PROBLEM 11-10

(a)	Original cost	$\$550 \times 3,000 =$	\$1,650,000
	Deduct residual value of land	$\$200 \times 3,000 =$	<u>600,000</u>
			1,050,000

Cost of logging road	<u>150,000</u>
Depletion base	<u>\$1,200,000</u>

$$\frac{\$1,200,000}{500,000 \text{ m}^3} = \$2.40 \text{ depletion per m}^3$$

(b)	Inventory	240,000	
	Accumulated Depletion—Timber		210,000
	Accumulated Depreciation—Logging Roads		30,000

Depletion, 2014: $20\% \times 500,000 \text{ m}^3 = 100,000 \text{ m}^3$;
Timber property: $100,000 \text{ m}^3 \times (\$1,050,000 / 500,000 \text{ m}^3) =$
\$210,000
Logging roads: $100,000 \text{ m}^3 \times (\$150,000 / 500,000 \text{ m}^3) =$
\$30,000

(c)	Loss of timber		
	$(\$1,050,000 - \$210,000)$	\$840,000	
	Cost of salvaging timber	700,000	
	Less recovery $(\$3 \times 400,000 \text{ m}^3)$	<u>(1,200,000)</u>	\$ 340,000
	Loss of land value $(\$200 \times 3,000)$		600,000
	Loss of logging roads		
	$[(\$150,000 - (20\% \times \$150,000))]$		120,000
	Logging equipment		<u>300,000</u>
	Loss due to eruption of Mt. Leno		<u>\$1,360,000</u>

Note: Under both ASPE and IFRS, the loss might be classified as unusual, and would be included in profit or loss for the period.

PROBLEM 11-11

- (a) The amounts to be recorded on the books of Darby Sporting Goods Inc. as of December 31, 2014, for each of the assets acquired from Encino Athletic Equipment Company are calculated as follows:

Cost Allocations to Acquired Properties

	Appraisal Value	Remaining Purchase Price Allocations	Reno- vations	Capitalized Interest	Total
(1) Land	\$290,000				\$290,000
(2) Factory		\$ 77,000 ¹	\$100,000	\$21,000 ²	198,000
(3) Machinery		<u>33,000¹</u>			<u>33,000</u>
Totals	<u>\$290,000</u>	<u>\$110,000</u>	<u>\$100,000</u>	<u>\$21,000</u>	<u>\$521,000</u>

Supporting Calculations

¹Balance of purchase price to be allocated.

Total purchase price	\$400,000
Less: Land appraisal	<u>290,000</u>
Balance to be allocated.....	<u>\$110,000</u>

	Appraisal Values	Ratios	Allocated Values
Factory	\$105,000	105/150 = .70 X \$110,000	\$77,000
Machinery	<u>45,000</u>	45/150 = <u>.30</u> X \$110,000	<u>33,000</u>
Totals	<u>\$150,000</u>	<u>1.00</u>	<u>\$110,000</u>

²Capitalizable interest (amount given in problem).

PROBLEM 11-11 (Continued)

Note to instructor: If the interest is allocated between the building and the machinery, \$14,700 ($\$21,000 \times 105/150$) would be allocated to the building and \$6,300 ($\$21,000 \times 45/150$) would be allocated to the machinery.

(b) Darby Sporting Goods Inc.'s 2015 depreciation expense, for book purposes, for each of the assets acquired from Encino Athletic Equipment Company is as follows:

1. Land: No depreciation.

2. Factory: Depreciation rate = $150\% \times 1/15 = .10$
2015 depreciation = Cost X Rate X 1/2 year
expense = $\$198,000 \times .10 \times 1/2$
= \$9,900

3. Machinery: Depreciation rate = $200\% \times 1/5 = .40$
2015 depreciation = Cost X Rate X 1/2 year
expense = $\$33,000 \times .40 \times 1/2$
= \$6,600

PROBLEM 11-11 (Continued)

(c) Arguments for the capitalization of interest costs include the following.

- 1. Interest costs incurred during construction of capital assets that take substantial time to get ready for use meet the definition of an asset if they are directly attributable to bringing the asset to the required location and condition to operate as intended by management.**
- 2. Total interest costs should be allocated to enterprise assets and operations, just as material, labour, and overhead costs are allocated.**

Arguments against the capitalization of interest include the following:

- 1. Interest capitalized in a period would tend to be offset by depreciation of interest capitalized in prior periods.**
- 2. Interest cost is a cost of financing, not of construction.**

PROBLEM 11-12 (Continued)

- (c) The answer to part (b) would remain the same. As of December 31, 2015, the asset is still in use and not ready for sale in its current state, and there is no active program to find a buyer, therefore the held for sale criteria are not met. The equipment would continue to be classified as property, plant, and equipment and depreciated in 2015 and into 2016 until the held for sale criteria are met.
- (d) Assuming that the asset meets all criteria classification as held for sale as of January 1, 2015, the equipment would not be depreciated in 2015. It would be classified as “held for sale” in a separate section of the balance sheet. The increase in fair value during 2015 would be recorded as follows:

Accumulated Impairment Losses—	
Equipment	300,000
Recovery of Loss from	
Impairment	300,000
 Fair value	 \$5,900,000
Carrying amount	<u>5,600,000</u>
Recovery of Loss from Impairment	<u><u>\$ 300,000</u></u>

- (e) For parts (b) and (c) the equipment would be shown as part of property, plant and equipment. For part (d), the equipment would be shown as a non-current “Asset held for sale” in a separate section of the balance sheet.

PROBLEM 11-12 (Continued)

- (f) Under IFRS, IAS 36 uses the Rational Entity Impairment Model and compares the asset's recoverable amount of \$5,800,000 (the higher of its value in use or discounted future net cash flows of \$5,800,000, and its fair value less costs to sell of \$5,600,000), with the asset's carrying amount of \$8,277,779 (as calculated in part a).

The impairment test indicates that impairment has occurred since the carrying amount exceeds the recoverable amount. The impairment loss is then calculated as follows:

Cost	\$10,875,000
Accumulated depreciation	<u>2,597,221</u>
Carrying amount	8,277,779
Recoverable amount	<u>5,800,000</u>
Impairment loss	<u>\$2,477,779</u>

December 31, 2014

Loss on Impairment.....	2,477,779	
Accumulated Impairment		
Losses—Equipment		2,477,779

December 31, 2015

Depreciation Expense.....	1,450,000	
Accumulated Depreciation—		
Equipment.....		1,450,000

New carrying amount	\$5,800,000
Useful life	<u>4 years</u>
Depreciation per year	<u>\$1,450,000</u>

PROBLEM 11-12 (Continued)

(f) (Continued)

Under IAS 36, the reversal of a previous impairment loss amount is limited. The specific asset cannot be increased in value to more than what its carrying amount would have been, net of depreciation, if the original impairment loss had never been recognized.

December 31, 2014 pre-impairment loss carrying amount.....	\$8,277,779
2015 depreciation based on pre-impairment carrying amount (\$8,277,779 ÷ 4 years).....	<u>2,069,445</u>
December 31, 2015 pre-impairment carrying amount....	<u>\$6,208,334</u>

The December 31, 2015 carrying amount would have been \$6,208,334 if the impairment had not occurred; this is the maximum carrying amount that can be reflected for the equipment in the December 31, 2015 balance sheet.

Actual December 31, 2014 carrying amount.....	\$5,800,000
Actual 2015 depreciation (based on impairment) ...(a)	<u>1,450,000</u>
Indicated December 31, 2015 carrying amount.....	4,350,000
December 31, 2015 fair value	<u>5,900,000</u>
Recovery of previously recognized impairment (b)	<u>\$1,550,000</u>

Thus, the net effect on the 2015 net income (loss) is a net increase of \$100,000 [= (a) – (b)]. The asset can be restored to its indicated December 31, 2015 fair value of \$5,900,000 as this does not exceed the carrying amount that would have existed at this date had the impairment in 2014 never been recognized.

December 31, 2015	
Accumulated Impairment Losses—	
Equipment.....	1,550,000
Recovery of Loss from Impairment	<u>1,550,000</u>

PROBLEM 11-12 (Continued)

- (g) For the information presented in financial statements to be relevant, faithfully represented, and useful to decision makers, each asset on the balance sheet must not be reported (valued) at an amount greater than its recoverable amount.**

Under IFRS, at the end of each reporting period, assets must be assessed for internal or external indicators of impairment. Under ASPE, assets must be assessed for indicators of impairment only when events and changes in circumstances indicate that an asset's carrying amount may not be recoverable. If one or more indicators of impairment exist, the entity should conduct an objective impairment or recoverability test. Frequent assessment for indicators of impairment helps to ensure that impairment or recoverability tests are conducted in a timely manner, and that asset values on the balance sheet are not overstated.

PROBLEM 11-13

The following accounting treatment appears appropriate for these items:

Land

February 15		
Cash	31,000	
Loss on Expropriation	9,000	
Investment Property		40,000
March 31 (entry not requested)		
Investment Property	35,000	
Cash		35,000

The loss on the expropriation of the land of \$9,000 (\$40,000 – \$31,000) should be reported as an unusual item on the income statement. The \$35,000 land purchase has no income statement effect. The treatment of the loss on disposal under IFRS and ASPE is the same.

Building

To correct April 2 entry		
Land	15,000	
Buildings		15,000
November entry		
Cash	3,600	
Land		3,600

There is no recognized gain or loss on the demolition of the building. The entire purchase cost (\$15,000), decreased by the demolition proceeds (\$3,600), is allocated to land.

PROBLEM 11-13 (Continued)

Warehouse

	June 30	
Cash	74,000	
Accumulated Depreciation – Buildings	16,000	
Gain on Disposal of Buildings		20,000
Buildings (Warehouse)		70,000

The gain on the destruction of the warehouse should be reported as an unusual item, assuming that it is a significant amount and infrequent. The gain is calculated as follows:

Insurance proceeds		\$74,000
Deduct: Cost	\$70,000	
Less accumulated depreciation	<u>16,000</u>	<u>54,000</u>
Realized gain		<u>\$20,000</u>

Some contend that a portion of this gain should be deferred because the proceeds are reinvested in similar assets. Deferral of the gain in this situation is not permitted under IFRS or ASPE.

Machine

	December 26	
Machinery (new)	6,300	
Cash	900	
Accumulated Depreciation – Machinery	2,800	
Machinery (old)		8,000
Gain on Disposal of Machinery		2,000

The recognized gain on the transaction is calculated as follows, assuming the trade-in transaction had economic substance:

Fair market value of old machine		\$ 7,200
Deduct: Cost	\$ 8,000	
Less accumulated depreciation	<u>(2,800)</u>	<u>5,200</u>
Total gain		<u>\$ 2,000</u>

PROBLEM 11-13 (Continued)

This gain would likely be reported in other revenues and gains. It is not likely to be reported as an unusual item because the company appears to acquire and dispose of capital assets on a regular basis. The cost of the new machine would be capitalized at \$6,300.

If there is no economic difference in the company after this trade than before (i.e., the transaction did not have economic substance), the new machine would be recognized at the book value of the assets given up: $(\$8,000 - \$2,800) - \$900$ received = \$4,300, and no gain would be recognized on the income statement. ASPE and IFRS require the same treatment.

Furniture

August 15	
Accum'd Depreciation – Furniture and	
Fixtures	7,850
Contribution Expense	3,100
Furniture and Fixtures	10,000
Gain on Disposal of Furniture and Fixtures	950

The contribution of the furniture would be reported as a contribution expense of \$3,100 with a related gain on disposal of assets of \$950: $\$3,100 - (\$10,000 - \$7,850)$. The contribution expense and the related gain may be netted, if desired.

Automobile

November 3	
Cash	2,960
Accumulated Depreciation—Automobiles	3,460
Loss on Disposal of Automobiles	2,580
Automobiles	9,000

The loss on sale of the automobile of \$2,580: $[\$2,960 - (\$9,000 - \$3,460)]$ would be reported in the other expenses or losses section. It is not likely to be reported as an unusual item because the company appears to acquire and dispose of capital assets on a regular basis.

PROBLEM 11-14

1. **\$82,000** Allocated in proportion to appraised values
 (1/10 X \$820,000).

2. **\$738,000** Allocated in proportion to appraised values
 (9/10 X \$820,000).

3. **Forty** Cost less residual (\$738,000 – \$40,000) divided
 years by annual depreciation (\$17,450).

4. **\$17,450** Same as prior year since it is straight-line
 depreciation.

5. **\$91,000** [Number of shares (2,500) times fair value (\$30)]
 plus demolition cost of existing building
 (\$16,000).

6. **None** No depreciation before use.

7. **\$30,000** Fair value.

8. **\$4,500** Cost (\$30,000) times percentage (1/10 X 150%).

9. **\$3,825** Cost (\$30,000) less prior year's depreciation
 (\$4,500) equals \$25,500. Multiply \$25,500
 times 1/10 x 150% or 15%.

10. **\$150,000** Total cost (\$164,900) less repairs and
 maintenance (\$14,900).

11. **\$37,500** Cost times 1/8 x 200% (\$150,000 X 1/8 x 200%).
 Rate is 25%.

12. **\$9,375** Cost less prior year's depreciation (\$150,000 -
 \$37,500)
 multiplied by 25% = \$28,125 for the year.
 Multiply by 4/12 to get expense since was
 sold Feb. 1.

PROBLEM 11-14 (Continued)

13.	\$52,000	Cash paid at acquisition:	
		Down payment	\$5,740
		First annual payment, Oct 1/14	<u>6,000</u>
			11,740
		Annual payments:	
		10 years, \$6,000, 8%, PV 6.710	<u>40,260</u>
		Total cost:	<u>52,000</u>
14.	\$2,600	Cost (\$52,000) divided by estimated life (20 years).	

PROBLEM 11-15

Situation 1:

<u>Year</u>		<u>Depreciation Expense</u>	
2011	\$1,000/year* X 7/12 =	\$583	
2012		1,000	*
2013		1,000	
2014		1,000	
2015		1,548	**
2016		1,735	***

***2011 to 2014:**

Straight-line Method: $\frac{\$12,400 - \$2,400}{10 \text{ years}} = \$1,000/\text{year}$

****2015:**

Revised estimate of useful life and residual value:

Carrying amount of equipment: $\$12,400 - (\$583 + [\$1,000 \times 3])$
 $= \$8,817$

Depreciation expense: $\frac{\$8,817 - \$2,000}{96 \text{ months} - 43 \text{ months}} = \$129/\text{month}$
 $= \$129/\text{month} \times 12 \text{ months} = \$1,548$

*****2016:**

Depreciation expense of old equipment $= \$129/\text{month} \times 4 \text{ months} = \$516$
+
Depreciation expense of new equipment $\frac{\$14,100 - \$1,300}{7} \times 8/12 = 1,219$
\$1,735

Cost of new equipment = Cash paid of \$11,300 plus fair value of old equipment of \$2,800 = \$14,100.

PROBLEM 11-15 (Continued)

Situation 2:

Cost of Truck = \$5,000 down payment + \$48,013 (present value of note)
= \$53,013

Present value of note = Annuity amount X Present value factor of \$1 for 4 years at 8%
= \$14,496 X 3.31213
= \$48,013

Calculation of interest expense is shown at end of problem.

2014:

September 30, 2014

Trucks	53,013	
Cash		5,000
Notes Payable		48,013

December 31, 2014

Interest Expense	960	
Interest Payable		960
(\$48,013 X 8% X 3/12)		
Depreciation Expense	4,770	
Accumulated Depreciation—Trucks		
(\$106/delivery* X 45 deliveries)		4,770

***Depreciation rate = \$53,013/ 500 deliveries = \$106 / delivery**

2015:

September 30, 2015

Interest Expense (\$48,013 x 8% x 9/12)	2,881	
Interest Payable	960	
Notes Payable	10,655	
Cash		14,496

PROBLEM 11-15 (Continued)

December 31, 2015			
Interest Expense	747		
Interest Payable		747	
(\$37,358 X 8% X 3/12)			
Depreciation Expense	13,250		
Accumulated Depreciation—Trucks			
(\$106/delivery X 125 deliveries)		13,250	
<u>2016:</u>			
September 30, 2016			
Interest Expense (\$37,358 x 8% x 9/12)	2,242		
Interest Payable	747		
Notes Payable	11,507		
Cash		14,496	
December 31, 2016			
Interest Expense	517		
Interest Payable		517	
(\$25,851 X 8% X 3/12)			
Depreciation Expense	14,204		
Accumulated Depreciation—Trucks			
(\$106/delivery X 134 deliveries)		14,204	
<u>2017:</u>			
July 31, 2017			
Depreciation Expense	8,374		
Accumulated Depreciation—Trucks			
(\$106/delivery X 79 deliveries)		8,374	
Cash	12,000		
Accumulated Depreciation—Trucks			
(\$4,770 + \$13,250 + \$14,204 + \$8,374)	40,598		
Loss on Disposal of Trucks	415		
Trucks		53,013	

PROBLEM 11-15 (Continued)

Interest Expense (\$1,723 – \$517)	1,206
Interest Payable	517
Notes Payable	25,851
Cash	27,574

Calculation of interest expense on the note payable:

<u>Fiscal Year</u>	<u>Carrying Amount of Note at beginning</u>	<u>Interest Expense (8%)</u>	<u>Payment</u>	<u>Reduction of principal</u>	<u>Carrying Amount of Note at end</u>
2014					\$48,013
2015	\$48,013	\$3,841	\$14,496	\$10,655	37,358
2016	37,358	2,989	14,496	11,507	25,851
2017	25,851	1,723*			

* Interest expense in 2017: \$25,851 X 8% X 10/12

Situation 3:

Cost of Machines = \$75,000 + \$2,000 freight + \$1,500 unloading charges = \$78,500

February 17, 2015

Machinery	78,500
Cash	78,500

December 31, 2015

Royalty Expense	13,000
Cash	13,000

Depreciation Expense	5,070
Accumulated Depreciation— Machinery(\$0.39/unit* X 13,000 units)	5,070

* \$78,500 / 200,000 = \$0.39 per unit

PROBLEM 11-15 (Continued)

Situation 4:

December 31, 2014

Depreciation expense	51,600	
Accumulated Depreciation - Equipment		51,600
(\$323,000 - \$65,000) / 5		

Depreciation expense is recorded until the equipment qualifies as held for sale.

Loss on Impairment	77,500	
Accumulated Impairment Losses – Equipment		77,500
(\$323,000 - \$51,600 X 9/12 - \$51,600 X 3) - \$52,000		

December 31, 2015

Accumulated Impairment Losses - Equipment	77,500	
Recovery of Loss from Impairment		77,500

For assets held for sale, loss recoveries are limited to the amount of the cumulative losses previously recognized. In this example, fair value less costs to sell increased by \$93,000 (\$145,000 - \$52,000) since the write-down on December 31, 2014. Therefore the full amount of the loss previously recognized may be recovered.

***PROBLEM 11-16**

(a) Capital Cost Allowance Schedule for Class 10, 30%.

	<u>CCA</u>	<u>UCC</u>
UCC, 01/01/2012		\$ 0
Additions during 2012:		29,200
Disposals during 2012:		0
CCA, 2012: \$29,200 X 30% X 1/2	\$4,380	(4,380)
UCC, 12/31/2012		<u>\$24,820</u>
UCC, 01/01/2013		\$24,820
Additions during 2013:		4,800
Disposals during 2013 (lesser of cost of \$8,000 and proceeds of \$7,000):		<u>(7,000)</u>
UCC, before CCA		22,620
CCA, 2013: \$22,620 X 30% (net additions must be greater than zero for ½-year rule)	\$6,786	<u>(6,786)</u>
UCC, 12/31/2013		<u>\$15,834</u>
UCC, 01/01/2014		\$15,834
Additions during 2014:		5,000*
Disposals during 2014:		0
CCA, 2014: \$5,000 X 30% X 1/2	\$ 750	
\$15,834 X 30%	4,750	<u>(5,500)</u>
UCC, 12/31/2014		<u>\$15,334</u>

***The investment tax credit of \$1,000 is included in the year following acquisition**

***PROBLEM 11-16 (Continued)**

	<u>CCA</u>	<u>UCC</u>
UCC, 01/01/2015		\$15,334
Additions during 2015:		0
Adjustment:		
investment tax credit on Asset E		(1,000)
Disposals during 2015:		
Asset A: (lesser of cost of \$20,000 and proceeds of \$9,900)		(9,900)
Asset C: (lesser of cost of \$1,200 and proceeds of \$1,800)		(1,200)
UCC, before CCA		3,234
CCA, 2015: \$3,234 X 30%	\$970	(970)
UCC, 12/31/2015		\$2,264
 UCC, 01/01/2016		 \$2,264
Additions during 2016:		0
Disposals during 2016:		
Asset D: (lesser of cost of \$4,800 and proceeds of \$0)		0
Asset E: (lesser of cost of \$4,000 and proceeds of \$500)		(500)
UCC, before CCA		1,764
CCA, none is taken since there are no assets left in the class.		
Terminal loss		(1,764)
UCC, 12/31/2016		\$0

***PROBLEM 11-16 (Continued)**

- (b) Capital gains occur where proceeds of disposal exceed the original cost of the asset. This is the case only for Asset C: Proceeds of disposal of \$1,800 less cost of \$1,200 = \$600 capital gain. Capital gains are taxed at a reduced rate; the taxable capital gain (50% X \$600) is included with other taxable income.**

A terminal loss of \$1,764 occurs in 2016 since there is still a positive UCC balance even though all assets have been disposed of. This balance is deductible in full when calculating taxable income for the period.

There is no recapture for any of the years. Recapture occurs when, after deducting the disposals from the class, a negative amount is left as the UCC balance. Recapture, when it occurs, is included in the calculation of taxable income in the year.

*PROBLEM 11-17

(a) Cost reduction method:

1.	Buildings	380,000	
	Cash.....		380,000
2.	Cash	180,000	
	Buildings		180,000
3.	December 31, 2014:		
	Depreciation Expense.....	3,333	
	Accumulated Depreciation –		
	Buildings		3,333
	(\$380,000 – \$180,000) ÷ 15 X 3/12 = \$3,333		
4.	December 31, 2015:		
	Depreciation Expense.....	13,333	
	Accumulated Depreciation –		
	Buildings		13,333
	(\$380,000 – \$180,000) ÷ 15 = \$13,333		

PROBLEM 11-17 (Continued)

(b) Deferral method:

1.	Buildings	380,000	
	Cash.....		380,000
2.	Cash	180,000	
	Deferred Revenue - Government Grants		180,000
3.	December 31, 2014:		
	Depreciation Expense.....	6,333	
	Accumulated Depreciation – Buildings ($\$380,000 \div 15 \times 3/12$)..		6,333
	Deferred Revenue - Government Grants	3,000	
	Revenue from Government Grant... $\$180,000 \div 15 \times 3/12 = \$3,000$		3,000
4.	December 31, 2015:		
	Depreciation Expense.....	25,333	
	Accumulated Depreciation – Buildings		25,333
	Deferred Revenue - Government Grants	12,000	
	Revenue --Government Grants $\$180,000 \div 15 = \$12,000$		12,000

(c) Kitchigami will report the same amount of income before tax whether the cost reduction method, used in (a) or the deferral method, used in (b) is used.

***PROBLEM 11-17 (Continued)**

	Method (a)	Method (b)
Income before depreciation and income tax	\$79,000	\$79,000
Other revenues: Government grant		12,000
Depreciation expense	13,333	25,333
Income before income tax	<u>\$65,667</u>	<u>\$65,667</u>
 (d) Class 6, 10%:	 CCA	 UCC
Beginning UCC, Jan. 1, 2014		\$0
Addition (\$380,000 – \$180,000)		\$200,000
UCC, before CCA		200,000
Less ½ net addition		(100,000)
UCC, for CCA purposes		100,000
CCA, 10%	<u>\$10,000</u>	<u>(10,000)</u>
		90,000
Add back ½ net additions		100,000
UCC, Dec. 31, 2014		<u>\$190,000</u>
 UCC, Jan. 1, 2015		\$190,000
CCA, 10%	<u>\$19,000</u>	<u>(19,000)</u>
UCC, Dec. 31, 2015 (tax value)		<u>\$171,000</u>

CASES

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

IC 11-1 CLUBLOOP (CL)

Overview

Although revenues are up 7.2%, net income is down significantly to \$822,000 due to a change in accounting policy and lawsuit settlements. There is a potential bias to offset the impact of large decline in net income. More information is needed on what the change in accounting principle was, and to determine how the change in accounting principle was handled. A change that was required to be applied prospectively might well explain the significant difference between the net operating income and net income. Since such a change in policy does not involve a cash flow, the situation may not be as bad as it first appears.

The working capital deficit on the draft f/s is contrary to the stated objective of making sure funds are available to meet approved capital expenditures etc. – therefore, there may be some bias to make the current ratio look better on the final statements.

The company is privately owned and therefore, there is no public-company-imposed GAAP constraint. Bankers, however, may require GAAP statements, as the company is dealing with significant amounts of investments and financing. The bank will focus on cash flow issues and declines in net income when assessing whether to extend the loan. The company has the option of following either ASPE or IFRS. GAAP differences are noted below.

As auditor, we must ensure financial reporting issues are resolved in such a way as to provide transparent financial reporting to the bank and other users.

Analysis and recommendations

Issue: Going concern issue given CRA assessment, potential lawsuits.

As can be seen from the issues that follow – this company might have some significant liquidity and business model issues. As auditors, we would need to consider these issues. The CRA assessment is a material amount since it is much larger than net income – need to disclose prominently, since at this point the outcome is not determinable. Note however, that the assessment is considerably less than the net operating income.

IC 11-1 (Continued)

The business model the company has would not usually result in significant accounts receivable. As is common in many companies that develop real estate, we should assess whether reporting a current asset and current liability section on the statement of financial position is appropriate for this company. It is the operating cash flow requirements (including the cash operating cycle), the cash flow statement and what the cash flow from operations is that are critical to the future of this company.

The current liabilities now include maturing LT debt the company expects to renegotiate during the year. This has to be looked into, but a going concern note may be a little premature. How much are the maturing LT liabilities and what is the likelihood of their being refinanced? If significant and highly likely to be refinanced, liquidity may not be an issue at all. This is very possible. Note that IFRS has more stringent requirements about the reporting of long-term debt that is expected to be refinanced.

Issue: Tax assessment

Disclose	Accrue
- Although the company feels that it may lose a certain amount if unsuccessful, at this point, the outcome is not determinable and therefore it does not meet the recognition criteria of measurable and probable. - Note disclosure might be the best way of signaling the problem and that there is significant measurement uncertainty. - Other	- It may be more transparent to show some accrual for this since the company feels that it may lose \$8.7 million if unsuccessful. - Would need to see if this number is sufficiently firm enough to warrant recognition. - Other

Conclusion: It would appear that it is too early to be able to determine the outcome and to measure the potential loss and therefore disclosure would be very important.

IC 11-1 (Continued)

Issue: Debt refinancing – If the current/non-current categories remain on the balance sheet, should the debt that is currently due be presented as current or long term debt given the imminent refinancing?

Current debt	Long-term debt
- Negatively affects current ratio – but is important and relevant information for the bank. - Refinancing is not yet in place. - IFRS is very explicit that the financing agreement must be in place by the year-end balance sheet date in order to present as long-term. The agreements do not seem to be cemented yet. Under ASPE, contractual obligations must be in place (the date is not explicit but normally, as long as these are in place by the time the statements are signed off, it is okay to classify as long-term).	- Working with financial institutions to replace. - Intent is to replace and there has been unsolicited interest prior to f/s being signed.

Conclusion: Leave as current debt until refinancing solidified. (Ensure that it is replaced with long term financing.)

Issue: \$1 million commitment to be spent on mitigation of environmental damage

Recognize \$1 million	Do not
- Represents a liability – company has a duty that it cannot avoid, if it wants to stave off the potential lawsuit. - The event creating the obligation was management's public commitment and approval by the Board. - Would reflect positively on the company. - Under IFRS constructive as well as legal obligations are recognized. - Will worsen current ratio if this money is to be spent within the year but this would be more reflective of reality.	- Represents commitment to do something in future. - Not legally binding (under ASPE only legally binding obligations for these types of costs are recognized). - Management entitled to change position. - May want to disclose something so that the bank will understand the company's position.

IC 11-1 (Continued)

Conclusion: It appears to be too early to recognize a liability since although management is committed to spending the money and it has been approved, they could still change their position. It has not yet been announced. Bank should know that the company has committed to this as it affects future cash flows.

Issue: If asset is now land to be sold to a developer instead of the development of a golf course, does this affect the costs that are already capitalized? Should those development costs now be reversed and charged to expense? New golf course – related costs such as interest and other.

Capitalize costs	Expense
- As long as costs are incurred to get the self-constructed property ready for its intended use – okay to capitalize. - It can be argued that these are incremental and directly related since new business cannot be set up without borrowing funds and management supervision. - Interest could be treated as part of the capital assets and would have a longer amortization period. Capitalization of borrowing costs that are directly attributable is required under IFRS and an accounting policy choice under ASPE. - Under ASPE capitalization ceases when assets substantially complete and ready for use. Under IFRS cease when item is in location and condition for use. - Under ASPE, net revenues prior to substantial completion are part of the cost. Under IFRS, these would be booked to income.	- Interest and other costs normally treated as period costs. - Part of normal ongoing costs to run business. - Do these costs add value to the property? May be difficult to prove. - As it is just the land the company is selling, it is already ready for use – therefore any additional costs should be expensed.

IC 11-1 (Continued)

Conclusion: The big issue is that the land is no longer a capital asset, but is now inventory. As such it should be carried at the lower of cost and net realizable value. Or – if it is a golf course or capital asset now held for sale, it will still be measured at realizable value and an impairment loss recognized. Under either, the remeasurement to net realizable value eliminates the issue of what to do with the costs. Therefore, have to clarify if the developed course was an item of property, plant, and equipment or an inventory item in order to determine whether any writedown is an impairment charge of an inventory adjustment to NRV. (Some costs, such as interest, would be capitalized regardless and included before determining the valuation adjustment).

Discussion of whether the course can be treated as held for sale? If there appears to be a formal plan and certain other criteria are met (available for sale, price reasonable – may need more information). Any costs that are capitalized would have to be recoverable from sales proceeds, or be included in the valuation adjustment.

IC 11-2 MA HYDRO (MH)

Overview

- Rate regulated by the government so must show accountability and justify costs
- GAAP is a constraint due to the fact that government likely wants GAAP statements (also audit required) and may choose ASPE or IFRS – ASPE may provide more relief in terms of requiring less disclosures and complex accounting. In addition, ASPE is more flexible which may allow for unique business model. IFRS may be more appropriate since accountable and need to access capital markets (banks) for capital.
- Company is a monopoly (owns and operates Ontario's electricity transmission systems – therefore must show that they are not taking advantage. In addition, regulated industry – must get approval for rate increases but basically allowed to recover costs plus a reasonable profit. May be some bias to show that they are not making an unreasonable profit and that they are controlling costs. May also be a bias to show that they value sustainability since they are evaluated by the government on this.
- Debt to total assets ratio is important since debt covenants state that debt cannot exceed 75% of total assets. If it does, the loans may be called. In addition, higher debt will cause cost of capital to rise and this will cause rates to increase (undesirable). Important to keep their good credit ratings.
- Special rate regulated accounting under ASPE – allows them to defer losses on assets that have been disposed – may be a bias to use this to show lower costs in the year.
- Role is that of accounting consultant – therefore must focus on transparency.

IC 11-2(Continued)

Analysis and recommendations

Smart meters

MH asset	Customer asset/not an asset on MH books
- Legal title with MH (must return the meter if customer cancels contract) – therefore risks with MH - Rewards also with MH since they benefit by renting out the equipment - Require security deposit up front equal to cost to protect against risk of loss - Like a lease contract – should recognize income over life of asset (three years) - Should depreciate the asset – which method? May depreciate more upfront since meters become obsolete over time. Or – use straight line since the meters last 3 years and likely the customer uses similar amounts of electricity over time. - Choice under IFRS to value at FV under revaluation method	- Located on customer property and therefore possession = rewards of ownership - Meters technologically obsolete within three years and therefore useless (likely that most owners keep the assets for most of their useful lives) - Is this like a sale of the equipment and service (MEA) – issue is how to allocate the total amount of the contract including the security deposit over the life of the asset – relative FV method or residual method

Conclude – note that special IFRS guidance (no guidance under ASPE) – IFRIC18. Could argue to treat as an asset since this is the most transparent.

IC 11-2(Continued)

Supply contracts

Purchase contracts	Derivatives
- These are normal purchase contracts to lock in a supply of electricity - The entity plans to use the electricity = expected use - No net settlement provisions - Concern about ensuring supply to customers (given old equipment)	- Meets the definition of a derivative since no funds upfront, settled in future and value of contract depends on value of electricity - Essentially net settleable since a commodity and markets exists which allow them to trade out of the position (regional commodities exchange) - May want to use hedge accounting since price is locked in and therefore no volatility (should not impact NI) – gains and losses to OCI under IFRS since cash flow hedge (future transaction) - Under ASPE – if considered to be an exchange traded contract – covered by 3856 would not recognize contract until maturity. - If hedge accounting used (voluntary) – must meet criteria and test for effectiveness

Conclude and why – essentially ASPE is the same as IFRS except as noted. If recognized and hedge accounting not used – makes net income look more volatile – however not transparent since price risk removed.

IC 11-2(Continued)

Asset impairment

Impair	Do not
- Since these are likely a significant portion of assets, must assess for impairment frequently - Also technology changing and old technology out of synch with new objective re sustainability - IFRS – recoverable amount is higher of value in use and FV less cost to sell - May be easier to calculate VIU since they have a stable customer base and allowed to recover all costs (rate regulated) - ASPE – compare to fair value less cost to sell – generally discount future cash flows only if carrying value is greater than undiscounted cash flows - May be an issue due to equipment being on lands held by Aboriginals – may not be able to access	- May be difficult to come up with the FV number since no market - They know that they can recover all costs so technically never impaired

Conclude and why – different tests under IFRS and ASPE. IFRS may result in earlier recognition of any impairments – negatively affects debt ratio

IC 11-2(Continued)

ARO

Recognize	Do not
- IFRS requires legal and constructive obligations to be recognized and provides more guidance (IAS 37) as to how to measure - Given sustainability objectives, likely constructive obligation - Old non-green technology likely means should accrue - Likely able to get increased rates to cover - If recognized must decide as to whether to capitalize or expense (capitalize only if meets definition of asset – would have to argue that part of cost of getting asset ready for use i.e. cannot use asset unless also provide for cleanup – like a product cost). Recoverable through increased rates.	- ASPE only requires legal obligations – none exist - May be too difficult to measure

Conclude and why – different recognition and measurement under IFRS – may result in greater liabilities being recognized – could negatively affect ratio (increased debt)

Assets on aboriginal land

W/O	Do not
- Must decide whether to impair or write off since do not have legal title to land and may not be able to move it (may not want to since old technology and significant costs)	- Currently still own the assets even if not the land. - Value still recoverable from future revenues assuming can increase prices to recover costs) - Still in negotiations – outcome uncertain at this stage – not far enough along

Conclude

Other issues:

- Relocation costs – capitalize or expense and why
- Other

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 11-1 (Time 25-35 minutes)

Purpose—to provide the student with an understanding of the basic objective of depreciation accounting. The case involves an increasing charge method of depreciation and the student is to comment on the appropriateness of such an approach. Finally, the classic issue of whether depreciation provides funds must be considered. An excellent case for covering the traditional issues involving depreciation accounting.

WA 11-2 (Time 20-25 minutes)

Purpose—to provide the student with the opportunity to discuss ethical issues involved in setting estimates of useful life and residual value and their impact on financial reporting.

WA 11-3 (Time 10-15 minutes)

Purpose—to provide the student with the opportunity to discuss the appropriateness of not recording depreciation for a mine due to shut down of the mine, changing the depreciation method and impairment testing. The situation is where the controller wants to take large write offs this year in order to improve earnings in the future.

WA 11-4 (Time 10-15 minutes)

Purpose – the student is required to discuss the differences in reporting and depreciating investment properties under ASPE and IFRS. In this question, the view point is a loan's officer at the bank and the most useful way to report these assets, given certain loan covenants that must be met.

WA 11-5 (Time 15-20 minutes)

Purpose—this writing assignment involves the step-up of depreciation charges because properties are to be replaced due to obsolescence. The case is somewhat ambiguous, so cut-and-dried approaches should be discouraged. Differences in impairment testing under ASPE and IFRS must be discussed.

TIME AND PURPOSE OF WRITING ASSIGNMENTS (Continued)

WA 11-6 (Time 25-35 minutes)

Purpose—to provide students with a situation where the company has three choices on how to report PP&E on transition to IFRS. The company also has a profit sharing plan based on earnings and a bank covenant based on debt to fixed assets to consider in determining whether to stay with the cost model or move to the revaluation model. Students must work through the numbers to assist with their discussion.

WA 11-7 (Time 20-25 minutes)

Purpose—this writing assignment provides an opportunity to reinforce the major differences between IFRS and ASPE, and to relate the differences to the conceptual framework.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 11-1

The purpose of depreciation is to distribute the cost (or other book value) of tangible capital assets, less residual value, over their useful lives in a systematic and rational manner. Under generally accepted accounting principles, depreciation is a process of allocating the cost of the asset to accounting periods in a pattern that reflects how the physical capacity, wear and tear, technical obsolescence or legal life are used up as the asset provides services.

The proposed depreciation method is systematic. Whether it is rational in terms of cost allocation depends on the facts of the case. It produces an increasing depreciation charge, which is usually not justifiable in terms of the benefit from the use of the asset because it is not likely that the asset benefits used up increase with the life of the equipment. As a general rule, the benefits delivered by an asset decline with age.

On the other hand, if the expected level of operations (including equipment usage) in early years of asset life is expected to be low as compared to that of later years because of slack demand or production policies, the pattern of the depreciation charges of the proposed method would approximately parallel the expected benefits used up and hence would be reasonable. Although the units-of-production depreciation method is the usual selection to fit this case, the proposed method might seem to be justifiable. However, it may be a “hard sell” to analysts and other users of financial statements, and may have adverse effects on user perceptions of the company – so an activity approach to allocation, such as units-of-production, may be a wiser choice. (Note that the IFRS issued a statement in December 2012 that proposes to eliminate the acceptability of an increasing charge depreciation method. This was done to reinforce the depreciation method chosen should reflect the pattern in which the asset benefits are physically delivered, not the future revenue stream from using the asset.)

Depreciation charges neither recover nor create funds. Revenue-producing activities are the sources of funds from operations: if cash flows from revenues exceed out-of-pocket costs during a fiscal period, funds are available to cover other costs; if revenues do not exceed out-of-pocket costs, no funds are made available no matter how much, or little, depreciation is charged.

WA 11-2

The objectives of depreciation are the matching of the cost of the asset to the asset benefits received on the income statement, and to properly reflect the asset's remaining costs to be recovered from future operations on the statement of financial position.

The stakeholders are HK's employees, including Tang, current and potential investors and creditors, and upper-level management.

The ethical issues are honesty and integrity in financial reporting, job security, and the external users' right to know the financial picture. As an ethical accountant, you should keep these in mind as you advise Tang.

As the Ethical Accountant, I would advise Tang to review the estimated useful lives and residual values of property, plant and equipment on an annual basis. Since they are estimates, it is possible that some *should be* changed. If there is a change in any of the elements of depreciation, either the depreciation rate or the depreciation method should be changed. Any changes should be based on sound, objective information without concern for the effect on the financial statements (or anyone's job). The following could change one of the elements of depreciation: unexpected physical deterioration, unforeseen obsolescence, and improved maintenance.

However, Tang should be made aware that by arbitrarily changing estimates of useful life and residual value, he would be violating the criteria of faithful representation and neutrality. He would be achieving short-term results at the cost of distortion of income in both the current and future periods. When the end of the useful life of the asset is reached and the asset is disposed, the difference between the disposal price and net book value will be transferred to the income statement in the year of disposal as a gain or loss. Tang should not arbitrarily change useful lives and the residual values of the property, plant and equipment for the sake of "saving jobs".

ASPE and international accounting standards require that effects of changes in estimates be accounted for in the period of the change and to future periods (i.e. prior periods are not affected). When a change in estimate occurs, depreciation is recalculated based on the new estimates. The accounting standards require disclosure of the following: the cost, the accumulated depreciation, the method of depreciation and the depreciation rate or period, the net book value of the property, plant and equipment and the depreciation expense for the period. IFRS also requires that each PP&E's net carrying amount show a reconciliation of all changes from the opening balance to the closing balance. If there is a change in rate, method, or period this needs to be disclosed in the notes to the financial statements. Further, the depreciation expense that has been recognized in the current year's income statement needs to be disclosed.

WA 11-2 (Continued)

(Note: This case can also be used with the chapter covering Accounting Changes and Error Analysis.)

WA 11-3

There are several issues that need to be addressed –

- whether or not depreciation should be recorded even though the mine was not used;
- the change in the depreciation method; and
- the estimate of the recoverable amount for the impairment test.

Issue #1 – Should depreciation be recorded even though there was no production and the equipment was not used? In this case, the equipment is tied to production and the units-of-production is an appropriate method of allocating the cost to the asset. Using this method, it would be appropriate for the company to forgo a depreciation charge for the year. Presumably, this loss of production might be made up in future years, and the depreciation charge might be higher than normal. In comparison, if the company had previously used the straight-line method or a declining balance method then it could be argued to continue to depreciate the asset, even though there was no usage. The difference relates to how the equipment deteriorates over time or usage. The straight-line method assumes that wear and tear occurs due to the passage of time, which is not the situation for Nickel Strike Mines.

Issue #2 – The controller is suggesting changing the depreciation method solely to influence net income of the current year and subsequent years. This approach is referred to as a 'Big Bath'. In other words, if results are already poor, and everyone is expecting poor results, companies may try to claim as many write offs as possible. Then in future years, the earnings will show higher amounts. This is not a valid reason to change a depreciation policy. Additionally, as indicated earlier, the units of production is an appropriate method to allocate the cost of the equipment to mining nickel. It is also a common method used in the industry. By changing the method for the reasons indicated by the controller, the criteria of faithful representation is not met. Finally, if the company decides to change its depreciation method for the Ontario mines only, this will be considered a change in estimate of the pattern of use for the assets. New depreciation rates will need to be established prospectively to ensure that the remaining useful life of the mines is allocated to the periods that will benefit from their use.

WA 11-3 (Continued)

Issue #3 – Impairment testing – In order to determine impairment, which must be tested annually, the company must determine the recoverable amount. For IFRS, this is the higher of the fair value less costs to sell or the value in use. In determining the value in use, the company will be required to determine future cash flows that the mine will generate. These future cash flows will be determined by estimating annual production rates, prices that the nickel can be sold for, and the costs of production over the life of the mine. If the company and the market are forecasting that nickel prices will significantly rebound in the future, the company will have a difficult time convincing readers that the commodity prices they have used were correct. As part of the disclosure required under IFRS, the company must provide the key inputs used in the determination of the recoverable amounts for the impairment test. Users, who are knowledgeable of the nickel mining industry, will then see that the inputs are unrealistic and start to question the company's credibility. Finally, the amount of impairment losses must also be disclosed giving the users information on how the asset values have changed.

Based on the foregoing, it will be difficult for the company to convince the readers of the financial statements that they have been faithfully presented.

WA 11-4

There are several issues to discuss here: the cost model and the fair value model for reporting investment properties, and the impact on covenant ratios.

Under ASPE, investment properties are classified as part of Property, Plant and Equipment and the cost model must be used. Under this model, the asset is initially recorded at cost, and then depreciated over its useful life using an appropriate method to allocate the cost of the building to the periods over which benefits will be realized. In this case, likely a straight-line method would be most appropriate, since the buildings would wear out over time and usage would be similar every year. Impairment is tested when an event or circumstance arises that would cause one to question the carrying amount of the asset. If the impairment tests are met, any impairment losses must be recorded and the asset is written down to its fair value. There is no opportunity to reverse impairment losses in subsequent years.

The impact on the balance sheet would be buildings whose carrying amount would decline every year. On the income statement net income would be reduced every year by a depreciation expense. In a year of impairment losses, this decline would be even greater. As the debt balance is the same no matter which accounting policy method is chosen for the PP&E assets, then the debt to total assets ratio would tend to be higher under an amortized cost approach than under a FV approach to the assets. The times-interest-earned ratio would also decrease with the depreciation charge and any impairment losses, since this would reduce the earnings before interest and taxes.

Under IFRS, an alternative is to report the investment properties using the fair value model. If used, this method must be applied to all the investment properties. It appears that the properties qualify as they are used solely for rental purposes. The fair value model requires that the investment properties be adjusted to fair value at the end of each reporting period. However, although there is no depreciation deducted, the change in the fair value of the properties is directly recorded into income. This will cause volatility in the net earnings if fair values increase or decrease over time. While it is true that technically there is no impairment test, since the property is recorded at fair value, the loss due to the declines in value would be reported as a loss in income in the year of decline. In addition, there will be additional costs incurred to determine the fair values – either the hiring of appraisers or time taken by staff to determine the values. These values will have to be disclosed in the notes, along with the key assumptions used in the determination of the values.

WA 11-4 (Continued)

The impact on the balance sheet might be a higher or lower value in comparison to the cost model since the value would fluctuate based on current market prices. Similarly, the net income could be higher or lower than the cost model, given the changes in fair value may be negative resulting in lower net income, or positive, resulting in higher net income.

The impact on the covenant ratios would also be volatile. If assets are valued higher using this model, the debt to asset ratio would be lower, and vice versa. The times-interest-earned ratio could be higher with the fair value model, in years when there were positive changes in the fair value of the properties.

From the bank's point of view, there are two issues. Likely, if the company changes its accounting policies, then the covenants required will also be changed. So if a fair value model is used, then the covenant maximums (or minimums as the case may be) will be revised for this method. The bank is interested in ensuring that there is enough security for the loans, and on predicting future cash flows that can be generated by the company. From this point of view, the fair value model might be more relevant and useful.

Finally, under IFRS, the amount of disclosure required is increased to include a reconciliation of the opening and closing balances of the carrying amount of the investment properties, assumptions used to determine fair values, related amounts of rental income, and direct operating expenses reported in income.

WA 11-5

Depreciation rates should be adjusted in order that the operating sawmills which are to be replaced will be depreciated to their residual value by the time the new facility becomes available in three years' time. This is the estimated useful life remaining for these three mills. The step-up in the depreciation rates should be considered as a change in estimate and prior years' financial statements should not be adjusted.

The three mills will continue to be classified as Property, Plant and Equipment and depreciated accordingly. This is the same treatment under ASPE and IFRS.

The fourth mill that did not operate for most of the current year should continue to be depreciated if using a straight line method. This is likely for the building itself. However, the equipment would likely use a units of production approach so that the amount of depreciation on it would be very low for the year. This mill should be tested for impairment (see discussion below).

Since there are changes in the circumstances, the three mills should be assessed for impairment in their values. Under ASPE, this test is only necessary when there is an event or a change in circumstances which is the case here. The first step is to determine whether each individual mill has independent cash flows and can be treated as a separate asset group or not. Assuming that each mill is a separate asset group, the next step is to compare the carrying value of each mill to the undiscounted future cash flows it will generate. If these cash flows total less than the carrying amount, then the final step is determine the fair value less costs to sell for each mill. If this fair value is less than the carrying value, then the mill will be written down to its fair value and an impairment loss recorded. In subsequent years this cannot be reversed.

Under IFRS, the mills must be assessed annually for impairment. It is likely that each mill would be treated as a separate cash generating unit since each mill appears to have independent cash flows. The carrying amount of each mill will be compared with its recoverable amount. The recoverable amount is the higher of the mill's fair value less costs to sell and its value-in-use. The value-in-use represents the discounted future cash flows that the asset will generate. If this recoverable amount is less than the carrying amount, then an impairment loss will be reported and the asset is written down. In subsequent years, the impairment losses can be reversed back up to what the asset's carrying amount would have been if the impairment loss had not been recorded.

The idle mill would be reclassified on the balance sheet as held for sale and re-measured at the lower of its carrying amount and fair value less costs to sell (net realizable value). Under ASPE, this will be shown separately as a long term asset. Under IFRS, provided all the criteria are met to reclassify this as held-for-sale, the asset would be shown separately under current assets.

WA 11-6

To: Board of Directors

From: Your name, VP-Finance

Date: January 22, 2013

Subject: Options available to report property, plant and equipment on transition to IFRS.

This memo addresses three alternatives that the company has on moving to IFRS for the reporting of property, plant and equipment. Each of the options has a different impact on the balance sheet and net earnings, subsequently, impacting the profit sharing bonus calculations and the debt to fixed asset covenant.

The first option is to continue what we have been doing – that is recording the assets at cost when acquired, and then depreciating them on a straight-line basis over their useful lives. Under this option, an annual depreciation expense is reflected in income, which reduces net income.

The second option would be on transition to IFRS, at January 1, 2014, to make a one-time adjustment to the PP&E to reflect the assets at their fair market values. This would then become their new deemed cost, and starting in 2014, there would be a higher depreciation expense required, since we would still be writing off the assets, at their new higher cost base, over their remaining useful lives on a straight-line basis.

The third option would be to adopt the revaluation method for the properties and plants, since market values can be reliably measured, but to maintain the cost model for the equipment. The revaluation model also requires annual depreciation on the carrying amounts, which at 2014 will be higher. Any positive changes in the value are initially recorded to other comprehensive income. In subsequent years, if the fair value is higher than the carrying amount, then an amount could be recorded to income but only to the extent of any revaluation losses recorded in prior years. Any surplus would be reported in other comprehensive income. For revaluation losses, these would be initially recorded against any surpluses in AOCI and then recorded to income to reduce net earnings. This method will likely increase the volatility of earnings.

The table below compares the impact of the two options in comparison to the cost model we currently use. The debt to fixed asset ratio is estimated to be 0.447 (\$1,700 / \$3,800) at January 1, 2014.

WA 11-6 (Continued)

	Balance sheet impact (1)	Net earnings impact for 2014 (2)	Profit sharing bonus 30% of net earnings	Debt/equity ratio
Option 2 – one time increase in value of PPE, and then cost model	Increase in assets by \$850 million	Higher depreciation by \$40 million	Lower total bonuses by: 30% X \$40 million = \$12 million	0.366 (3)
Option 3 – revaluation model for only property and plant	Increase in assets by \$750 million	Higher depreciation by \$30 million	Lower total bonuses by: 30% X \$30 million = \$9 million	0.374 (4)

Notes:

- (1) The increase in value for the property and plant would be: $\$3,250 - \$2,500 = \$750$ million. The increase in value for equipment would be $\$1,400 - \$1,300 = \$100$ million. Total increase in value is \$850 million.
- (2) The difference in the depreciation for the property and plant will be: $\$750/25 = \$30$ million. The difference in the depreciation for the equipment will be: $\$100/10 = \$10$ million.
- (3) Debt/fixed assets = $\$1,700 / (\$3,250 + \$1,400) = 0.366$
- (4) Debt/fixed assets = $\$1,700 / (\$3,250 + \$1,300) = 0.373$

As you can see from the table, the debt to fixed asset ratio improves significantly. However, the bank might change the maximum allowed for this covenant if we change our accounting policy.

The bonuses are reduced between \$9 to \$12 million, which will cause some concern with our employees and management. However, if the company has a "Compensation committee" (or similar mechanism) it could consider modifying the bonus plan to take into account the change in policy.

There is a substantial increase in the asset value. However, keep in mind that as market prices change, these values may also drop, which could make the balance sheet look weaker in comparison with our existing cost model.

I look forward to discussing this at the coming meeting.

WA 11-7

Generally, ASPE has been designed to reduce the complexity of calculating depreciation and testing the asset for impairment, and in the amount of disclosure required.

The major differences between ASPE and IFRS are as follows:

- Although ASPE indicates that costs of large assets should be allocated into separable components if practicable, in practice, this has not been the case. Under IFRS, when parts of the asset depreciate at different rates, components should be identified, and there is no mention of practicability. This of course, leads to much more complex record keeping for PP&E reported using IFRS.
- The impairment testing under ASPE is far less onerous than under IFRS. First of all, testing of impairment only needs to be done when events or circumstances indicate that the carrying amount might be impaired. (IFRS requires this to be completed at every reporting date.) Secondly, for the impairment test under ASPE, the first step is to total the future cash flows generated by the asset to determine whether the asset's carrying value will be recovered. At this point, only if this test fails, must an appropriate discount rate be calculated and a fair value determined as part of the second step. This is far less complex than having to determine the fair value initially for the first step, as required under IFRS. The final difference in accounting for impairments is that under ASPE, there is no reversal of the write down allowed. This means that the entity does not have to keep track of the write-downs by asset or the carrying costs of the assets as if they had not been written down. This type of information is required under IFRS since write ups are allowed but only to the amount the carrying value of the asset would have been if the impairment write down had not been made.
- Under ASPE, held for sale designated assets and related liabilities maintain their current/noncurrent presentation, until the sale is completed, at which time these assets (and liabilities) can be moved to current assets. Under IFRS, as soon as the asset is designated as held for sale, the values are transferred to current. The reason for this difference is likely in keeping with common practice in Canada.

WA 11-7

- Finally, the disclosure under IFRS is far more extensive than under ASPE. As ASPE was designed to reduce the volume of disclosure, the following IFRS disclosures are not required:
 - o reconciliation of opening and closing balances of each class of the PP&E asset;
 - o additional disclosures related to the fair value-based measurement bases of PP&E as only the cost-based method is permitted.
-

RESEARCH AND FINANCIAL ANALYSIS

RA 11-1 CANADIAN TIRE CORPORATION

(a)

		Financial services	Real Estate Manage- ment	Technology
	Canadian Tire (millions)	AGF Manag. Limited (thousands)	Brookfield Asset Manage- ment Inc. (millions)	Research in Motion (millions – U.S. \$)
	Dec 31, 2011	Nov 30, 2011	Dec 31, 2011	Mar 3, 2012
Property and equipment	<u>\$3,365.9</u>	<u>\$ 11.03</u>	<u>\$58,040</u>	<u>\$2,748</u>
Total assets	<u>12,338.8</u>	<u>5,231.16</u>	<u>\$91,030</u>	<u>\$13,731</u>
Percentage of total assets	<u>27.3%</u>	<u>0.2%</u>	<u>63.8%</u>	<u>20.0%</u>

Canadian Tire has a relatively high percentage of property and equipment compared to total assets. The only industry, of those examined, that has a higher property and equipment percentage is the real estate asset management industry, which holds real property, power stations and other infrastructure and therefore is capital asset intensive. The financial services industry has the lowest percentage of property and equipment because the majority of its assets consist of financial assets as opposed to tangible capital assets.

RA 11-1 CANADIAN TIRE CORPORATION (Continued)

The information for parts (b), (c) and (d) is summarized below:

(in millions of dollars)	2011	2010	2009
Total assets	<u>\$12,338.8</u>	<u>\$11,048.5</u>	<u>\$8,872.5</u>
Average total assets	<u>11,693.65</u>	<u>9,960.5</u>	<u>8,328.15⁽¹⁾</u>
Gross operating revenue	<u>10,387.1</u>	<u>9,213.1</u>	<u>8,686.5</u>
Net earnings	<u>467</u>	<u>444.2</u>	<u>335</u>
RATIOS:			
Total asset turnover = Gross operating revenue / Average total assets	<u>1.13</u>	<u>0.92</u>	<u>1.04</u>
Profit margin = Net earnings / Gross operating revenue	<u>4.5%</u>	<u>4.8%</u>	<u>3.9%</u>
Return on assets = Total asset turnover X Profit margin	<u>5.1%</u>	<u>4.5%</u>	<u>4.0%</u>

⁽¹⁾2008 total assets = \$7,783.8

The total asset turnover has increased over the years due to a proportionately larger increase in gross operating revenue relative to total assets. Profit margin increased (in 2010) and then fell in 2011 due to an increase in net earnings that was less than, in percentage terms, the increase in gross operating revenue during that time period. Every dollar of revenue generated a higher percentage of profits for the owners in 2011 than it had in 2009. These ratios likely reflect the recovery of the economy from the financial crisis in 2008.

(e)

To increase the return it earns on its investment in assets, Canadian Tire can focus on either improving turnover or profit margin. This could be done by increasing its net earnings relative to gross operating revenue or by decreasing total assets relative to gross operating revenue – but neither of these solutions just “happen” and real initiatives to achieve these objectives will need to be planned carefully (and the student solution should include some suggestions).

RA 11-2 BROOKFIELD ASSET MANAGEMENT INC.

- (a) Brookfield is a global asset manager with approximately \$150 billion in assets under management. The company invests in assets with long term sustainable cash flows including commercial office, retail and residential properties, hydroelectric and wind energy power assets, and infrastructure assets including timberlands and transmission assets.
- (b) All of the capital assets were reported at cost less accumulated depreciation in 2009. Interest was capitalized during construction. Currently, the company used the following depreciation policies for each of these classes of assets:
 - i. Commercial properties – buildings were depreciated on a straight-line basis over estimated useful lives up to a maximum of 60 years.
 - ii. Power generation – various rates on a straight-line basis up to 60 years.
 - iii. Timberlands – depletion was determined based on the number of cubic metres of timber harvested annually at a fixed rate.
 - iv. Utilities and energy – various rates on a straight-line basis up to 40 years
 - v. Transportation assets – various rates on a straight-line basis up to 35 years.

During the year, depreciation in the amount of US\$1,275 million was recorded.

Asset impairment was recognized if the total undiscounted future cash flows from an asset or group of assets are less than its carrying value. The future cash flow projections consider the operating plans and management's best estimate of the most probable future economic conditions.

- (c) The policies the company has adopted are detailed below for each category of capital asset:
 - i. Investment properties – under IFRS, the company has used the fair value model. The fair value was determined using rental income from current leases, assumptions about rental income from future leases less related costs. The projected future cash flows over a term of 10 years were discounted using a weighted average discount rate of 7.5% and terminal capitalization rate of 6.3%.

RA 11-2 (Continued)

(c) (Continued)

- ii. Power generating stations – The company accounts for power assets using the revaluation model, with the most recent revaluation occurring on December 31, 2011.
- iii. Utilities and energy – Utilities assets are accounted for under the revaluation model and the most recent revaluation was December 31, 2011. The company determined fair value to be the replacement cost.
- iv. Timberlands – Timberlands were accounted under the revaluation model and the most recent revaluation was December 31, 2011.
- v. Transportation assets – The revaluation model was used with the most recent revaluation at December 31, 2011. It was determined that fair value was equal to replacement cost.

Other property, plant and equipment – Private equity assets are accounted for using the cost model. The carrying value is the original cost less accumulated depreciation and impairments.

(d) Based on IFRS 13, there are three levels of fair value measurement as follows:

- a. Level 1 input - there is a quoted price in an active market for an identical asset
- b. Level 2 measurement - significant use of other observable inputs
- c. Level 3 measurement - significant use of unobservable inputs

The company has used discounted future cash flows to determine fair values for investment properties and power generating stations. This is a level 3 value since most of the inputs are not observable in the market place. For timberlands, it has used future sales based on future expected market prices for similar assets. This is a market comparable approach or level 2 measurement.

The other type of fair market valuation technique is to use quoted market prices.

RA 11-2 (Continued)

The most reliable method from a user's perspective would be to use quoted market prices (Level 1 in fair value hierarchy) since the actual quoted market price is used. Using market prices for comparable assets is second (Level 2 in fair value hierarchy) since some observable inputs are used, but some assumptions are also required. The least reliable is discounted cash flows due to the number of assumptions that must be made (Level 3 in the fair value hierarchy). However, it is not always possible to use Level 1 or even Level 2 methods, in which case Level 3 is the best alternative available.

RA 11-3 CANADIAN NATIONAL RAILWAY COMPANY (CNR) and CANADIAN PACIFIC RAILWAY LIMITED (CPR)

- (a) Investment in property plant and equipment is very significant for both companies as shown below.

	CNR	CPR
	<u>2011</u>	<u>2011</u>
	(millions \$)	(millions \$)
Property, plant and equipment	<u>\$23,917</u>	<u>\$12,752</u>
Total assets	<u>26,026</u>	<u>14,110</u>
Percentage	<u>91.9%</u>	<u>90.4%</u>

- (b) The categories of property, plant and equipment reported by each company are the same. Both companies report track and roadway, rolling stock, buildings, information technology and other as the major asset categories.
- (c) CPR capitalizes major new computer system development costs and the cost of major overhauls and large refurbishments. These costs include direct costs and directly attributable indirect costs. CPR also capitalizes asset retirement costs when there is a legal obligation to incur the future cost.

CNR capitalizes the costs of developing computer software for internal use and capitalizes all, labour, material and other costs associated with the installation of track improvements to the extent that they meet the Company's capitalization criteria. Major overhauls and large refurbishments are capitalized when they extend the useful life or increase the functionality of the asset.

Neither company capitalizes interest costs. Both companies test the assets for impairment when circumstances change indicating that the future undiscounted cash flows may not recover the carrying amounts of the assets.

The capitalization policies of the two companies are very similar but CNR provides slightly more detailed disclosure.

RA 11-3 (Continued)

- (d) Both companies use straight-line depreciation over the estimated useful lives of the assets. Both companies follow the group method of depreciation for railroad properties. The method groups assets that are similar in nature and useful lives. In the case of CPR, the property groups are depreciated based on their expected economic lives determined by historical experience and engineering estimates.

For CNR, the company states that it conducts comprehensive depreciation studies on a periodic basis to determine the useful lives of the properties. In 2011, after such an assessment, an increase in depreciation expense of \$30 million was required related to its Canadian and U.S. properties.

- (e) The estimated useful lives/rates used vary among the asset categories between the two companies. The most significant difference is that CNR uses 2% straight-line for all track and roadway, while CPR uses 2.7%. For the rolling stock, CNR uses 4% (25 years), while CPR uses 2.7%. The computer system for CPR is depreciated at a rate of 9.5%, and for CNR at a rate of 12%.

CPR also notes that depreciation of "rail and other track material in the United States" is "based directly on usage," which is volume of traffic. It is not possible to quantify the effects of this difference but whenever depreciation charges are based on actual usage versus strictly the passage of time, results can vary from year to year as actual usage of the asset varies.

RA11-4 LUFTHANSA AND AIR CANADA

- (a) For Lufthansa - There are four types of capital assets on the balance sheet that fall into this category: Aircraft and reserve engines EUR 11,592m; Repairable spare parts for aircraft EUR 840m; Property, plant and equipment EUR 2,118m. This totals EUR 14,550m which represents 51.8% ($\text{EUR}14,550\text{m} / \text{EUR}28,081\text{m}$) of all assets.

For Air Canada, the company has the total property, plant and equipment of \$5,088m which represents 52.8% ($\$5,088\text{m} / \$9,633\text{m}$) which is slightly higher than Lufthansa.

- (b) For Lufthansa - Based on descriptions in Note 2, the company accounts for the tangible assets by capitalizing any assets that have a useful life greater than one year. The assets are reported at cost less accumulated depreciation. For assets that are constructed, costs include costs directly attributable to the manufacturing process as well as some portion of indirect costs related to the process. Borrowing costs in close connection with the purchase or production of qualifying assets are also capitalized. The assets are depreciated over their estimated useful lives on a straight-line basis as follows:

- New aircraft and spare engines – 12 years, with a residual value estimated at 15%.
- Buildings – 20 to 45 years.
- Leased buildings, fixtures and fittings – the lesser of the asset's useful life or the lease term – usually 10% to 20% per annum.
- Plant and machinery – useful life of up to 10 years.
- Operating and office equipment – 3 to 10 years.
- Repairable spare parts are continually adjusted to average acquisitions costs. These parts are assigned to individual air crafts and depreciated at the same rate as the related aircraft.
- Investment properties – are valued at historical cost less depreciation, but there is no disclosure of the depreciation rate. Investment properties are exclusively rented out.

RA11-4 (Continued)

(c) For Air Canada – In 2010, the company used the cost model for all of its properties. Interest paid on funds borrowed to finance new aircrafts and other property and equipment was capitalized. Capitalized interest also includes financing costs charged by the manufacturer. The company depreciates the assets to their residual values on a straight-line basis as follows:

- Aircraft and flight equipment, including spare engines and related parts (rotables) were depreciated over 20 – 25 years to a residual value that is 10% to 20%.
- Aircraft configuration costs – 3 to 5 years.
- Betterments to owned aircraft are capitalized and depreciated over the remaining service life of the aircraft.
- Betterments to leased aircraft are capitalized and depreciated over remaining term of the lease.
- Buildings depreciated over lives not exceeding 50 years – on a straight-line basis.
- Buildings on leased land – depreciated over the lesser of the lease term or the useful life of the building.
- Leasehold improvements – over the lesser of lease term or 5 years
- Ground and other equipment – 3 to 25 years.

In 2011, under IFRS, the company transferred its assets to the new basis at fair value and subsequently the cost method was used. Borrowing costs are capitalized when attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use. The company depreciates the assets to their residual values on a straight-line basis as follows:

- Airframes and engines are depreciated over 20 – 25 years to a residual value that is 10% to 20%.
- Cabin interior and modifications are depreciated over the lesser of 5 years and remaining useful life of aircraft
- Spare engines and related parts are depreciated over average life of their fleets to a residual value of 10% to 20%
- Aircraft configuration costs – 3 to 5 years.
- Betterments to leased aircraft are capitalized and depreciated over remaining term of the lease.
- Buildings depreciated over lives not exceeding 50 years – on a straight-line basis.
- Buildings on leased land – depreciated over the lesser of the lease term or the useful life of the building.
- Leasehold improvements – over the lesser of lease term or 5 years

RA11-4 (Continued)

Ground and other equipment – 3 to 25 years

- (d) The IFRS treatment applied by Lufthansa and Air Canada in 2011 are very similar and major differences would be due to depreciation policies as Air Canada uses much longer useful lives e.g. Lufthansa depreciates aircraft over 12 years, and Air Canada uses terms much longer of 20 to 25 years. This will result in more depreciation expenses for Lufthansa and lower net earnings.

In all cases, the useful life estimated by Air Canada is almost twice the amounts estimated by Lufthansa. It is interesting to note that residual values on aircraft are estimated for Air Canada to be 10 – 20% of cost after 20 to 25 years, in comparison to Lufthansa that estimates 15% residual value but only after 12 years. This is quite a discrepancy in predictions.

Differences between the policies for Air Canada in 2010 and 2011 are:

Under IFRS, major maintenance events on finance leased and owned airframes and major maintenance of finance leased and owned engines, including replacement spares and labour costs, are capitalized and amortized over the average expected life between major maintenance events – this will result in lower maintenance costs initially and higher net earnings

Based on Air Canada's policies, the company will show lower depreciation expenses and lower interest expenses, resulting in higher net earnings in comparison to Lufthansa. Additionally, the assets will have higher carrying values for Air Canada than for Lufthansa, which writes down its assets faster. The transition to IFRS will also result in lower maintenance expenses on the income statement for Air Canada, due to its policy to capitalize major maintenance events.

- (e) Lufthansa – As per note 2, the company tests if the recoverable amount (being the higher of the fair value less costs to sell and the net present value of estimated future cash flows from the use of the asset) is less than the carrying amounts of the assets. If so, then an impairment loss is reported. However, in subsequent years, the impairment losses can be reversed in whole or in part. Fair value less costs to sell is determined using recent market transactions, if available. During the year, as indicated by Note 9, there were impairment losses of EUR 59 million reported, of which EUR 57 million related to eighteen aircraft that were held for sale and recognized at their fair value less costs to sell. As indicated in note 19, there was a reversal of an impairment loss on aircraft and reserve engines in the amount of EUR 3 million during 2011.

RA11-4 (Continued)

- (f) For Air Canada – assets are only tested for impairment when circumstances or events occur that would suggest that the carrying value is greater than the recoverable amount. Impairment is tested by comparing the current carrying amount to the recoverable amount, calculated as the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use.
- (g) Lufthansa has capital assets held for sale which include two Boeing B747-400s, two Airbus A340-300s, six Boeing B737-300s, one Airbus A330-300, three Canadair Regional Jet 200s and five Avro RJs with a total carrying amount of EUR 64 million. Additionally, assets held for sale consist of assets to be sold as part of the sale of British Midland Ltd. and a previous spin-off. These are shown as current assets. The accounting policy note (note 3) indicates that these are non-current assets that are expected to be sold in the next twelve months and are shown at the lower of their carrying amount at the time of reclassification and fair value less costs to sell. We saw earlier, that an impairment loss of EUR 57 million was recorded on these assets when they were written down to fair value. Air Canada currently has no assets held for sale.

RA 11-5 First Capital Realty

- (a) First Capital Realty is a Canadian company involved in ownership, development and operation of supermarket and drugstore-anchored neighbourhood and community shopping centres located predominantly in growing urban markets. The company currently owns interests in 169 properties and trades on the Toronto Stock Exchange.
- (b) The single most significant difference between reporting under ASPE versus IFRS is that the IFRS statements uses the fair value model to report investment properties and the revaluation model to report properties under development. As a consequence, there are no depreciation charges recognized. ASPE reports fixed assets using the cost model at historical cost less accumulated depreciation less any accumulated impairment losses. Therefore, net income on the 2010 Income Statement prepared under IFRS are higher than the Income Statement prepared under Canadian GAAP by \$273,663 plus lease accounting and deferred tax differences. This difference arises due to the fair value valuation gains recorded under IFRS, plus depreciation of \$90,949 recorded under the Canadian GAAP statements. (All dollars are reported in thousands).

RA 11-5 (Continued)

The Investment Properties are carried at different values on the Balance Sheet when comparing the two balance sheets prepared. Following IFRS, the investment properties are carried at fair value and no depreciation is recorded. More specifically, Investment properties (shopping centres) were recorded in 2011 on the IFRS balance sheet at a value of \$4,734,574 and on the Canadian GAAP balance sheet at a Net Book Value of \$3,578,960. Development properties are also different since under IFRS these are accounted for using the revaluation model and under Canadian GAAP the cost model is used. On the IFRS statement, the development land is \$88,859, in comparison to the Canadian reported amount of \$306,843.

There are also differences on the Statement of Cash Flows with regard to the cash used for investments in investment properties. IFRS reports an amount of \$56,764 as Investment in investment properties, while the Canadian GAAP Cash flow statement reports the amount of \$52,660 as Investment in investment properties.

(c)

2010 Total asset turnover:

<u>ASPE</u>		<u>IFRS</u>	
$\frac{\$485,016}{\frac{\$4,120,713 + \$3,691,643}{2}} = .124$		$\frac{\$482,475}{\frac{\$4,988,017 + \$4,285,025}{2}} = .104$	

2010 Profit margin:

<u>ASPE</u>		<u>IFRS</u>	
$\frac{\$41,338}{\$485,016} = 8.52\%$		$\frac{\$249,497}{\$482,475} = 51.7\%$	

2010 Rate of return on total assets: Total asset turnover x Profit margin

<u>ASPE</u>		<u>IFRS</u>	
$= 1.06\%$		$= 5.38\%$	

- (d) The profitability ratios are better when using the financial statements prepared under IFRS. This is largely due to the use of fair value for fixed assets under IFRS, which in 2010 resulted in a large increase in value and as a result a larger profit was reported on the income statement.

RA 11-5 (Continued)

- (e) In writing the memo to the CFO of another company in the same business as First Capital Realty, the following points should be reflected:
- When ASPE financial statements are changed to international standards, there will be significant changes required to the financial statements.
 - Property, plant and equipment may be changed to a revaluation approach. Specifically, IAS 16 permits classes of property, plant and equipment to be revalued to their fair value with surpluses charged to a shareholder's equity account ("revaluation surplus") and losses are reported in income. Depreciation would then be based on the fair values. Property, plant and equipment are reported on the balance sheet at the revalued amount less subsequent accumulated depreciation.
 - IAS 40 permits the fair value measurement model for investment properties with the changes recognized in income. Therefore, the income statement would reflect a gain or loss due to valuation changes which could impact the net earnings significantly and there is no depreciation recorded. Investment properties are reported on the balance sheet at fair value. The asset turnover and profitability ratios would be impacted as a result of these changes.
 - Where the fair values of the fixed assets increase, the net earnings, total assets and profitability ratios would also increase. Where values decline, the net earnings, assets and ratios would also decrease.
 - Other possible changes are as follows:
 - o With regard to the impairment test, IFRS defines the recoverable amount in terms of fair values and discounted cash flows
 - o Also, IFRS allows the impairment loss to be reversed when the estimates to determine an asset's recoverable amount is changed

RA 11-6 DEFERRED MAINTENANCE

- (a) Note to instructors: The following material is extracted from “Deferred Maintenance Reporting for Federal Facilities: Meeting the Requirements of Federal Accounting Standards Advisory Board Standard Number 6, as Amended”.

“Deferred maintenance is defined as maintenance that was not performed when it should have been or was scheduled to be, and which, therefore, is put off or delayed for a future period. Deferred maintenance is generally quantified as the estimated cost of the maintenance and repair needed to bring a facility up to a minimum acceptable condition. The significance of the existence of deferred maintenance is that it implies that the quality and /or reliability of service provided by infrastructure on which maintenance has been deferred is lower than it should be and thus the infrastructure is not or will not later be adequately serving the public. In the short-term deferring maintenance will diminish the quality of building services. In the long-term, deferred maintenance can lead to shortened building life and reduced asset value. “

Studies have indicated that significant needed maintenance and repairs have been deferred because of under funding or other factors. Public officials have not often found the arguments for maintenance and repair funding compelling and have called into question the methodologies used to define building deficiencies and to calculate the costs involved in repairing them.”

The issue of deferred maintenance is being studied for public sector organizations since a significant portion of public services are considered to be dependent on structures (such as buildings, roads, etc.) on which substantial deferred maintenance exists. The current Public Sector Accounting Recommendations state that disclosure with respect to deferred maintenance is desirable:

“Governments are encouraged to measure the extent to which maintenance has been deferred on their material and complex network assets, such as highways. Governments may want to consider providing this information in their financial statements because it can add to the picture given of the financial condition of a government. Deferred maintenance information, like information on commitments and contingencies, is useful for understanding and assessing future revenue requirements and could be presented as supplementary disclosure in the notes or schedules to the financial statements.”

- (b) Answers will vary.

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CHAPTER 12

GOODWILL AND OTHER INTANGIBLE ASSETS

ASSIGNMENT CLASSIFICATION TABLE

Description	Brief Exercise	Exercise	Problem	Writing Assignment
1. Importance of intangible assets	1			
2. Characteristics of intangible assets	2, 3		1, 2, 3	
3. Recognition, measurement of purchased intangibles	2, 3, 4, 5, 6, 7, 8, 10, 14	1, 2, 3, 5, 6, 7	4	1,5
4. Recognition, measurement of internally developed intangibles	2, 3, 6, 7, 8, 9, 11, 12	4, 5, 6, 7, 8, 9, 10, 11	1, 5	2,3,5
5. Subsequent accounting for intangibles	9, 12, 13, 14, 15	4, 5, 6, 7, 8, 9, 10, 11, 12	2, 4, 5, 6, 7, 9	3,5
6. Accounting for specific types of intangibles	10	1, 2, 3, 6, 7, 9, 10	3, 7, 8	
7. Impairment of limited-life and unlimited life intangibles	16, 17, 18	11, 13, 14, 15, 16, 17, 18	7, 8, 9	
8. Accounting for goodwill	19, 20, 21	2, 3, 19, 20, 21	3, 4, 10, 11, 12, 13	1,4,5
9. Disclosure			1, 3, 5	
10. ASPE v. IFRS	13, 15, 16, 17, 20, 21	1, 10, 11, 13, 14, 15, 16, 17, 18, 20, 21	2, 3, 8, 10, 11	3,6
11. * Basic approaches to valuing goodwill	22	22, 23, 24, 25, 26	12, 13	1,4

*This material is covered in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E12-1	Classification issues—intangibles.	Moderate	15-20
E12-2	Classification issues—intangibles.	Simple	10-15
E12-3	Classification issues—intangible asset.	Moderate	10-15
E12-4	Limited-life intangible amortization.	Moderate	15-20
E12-5	Correct intangible asset account.	Moderate	15-20
E12-6	Recognition and amortization of intangibles.	Simple	15-20
E12-7	Accounting for trade name.	Moderate	25-30
E12-8	Accounting for internally generated	Simple	10-15
E12-9	Accounting for internally generated	Moderate	25-30
E12-10	Accounting for patents, franchises, and R&D.	Moderate	15-20
E12-11	Accounting for internally generated	Moderate	25-30
E12-12	Revaluation model	Moderate	20-25
E12-13	Intangible impairment.	Simple	20-25
E12-14	Intangible impairment.	Simple	10-15
E12-15	Intangible impairment.	Simple	20-25
E12-16	Intangible impairment.	Simple	10-15
E12-17	Accounting for intangibles/impairment	Moderate	15-20
E12-18	Impairment	Simple	15-20
E12-19	Accounting for goodwill	Moderate	15-20
E12-20	Accounting for goodwill	Simple	15-20
E12-21	Accounting for goodwill	Moderate	15-20
*E12-22	Calculate normal earnings.	Simple	10-15
*E12-23	Calculate goodwill.	Moderate	20-25
*E12-24	Calculate goodwill.	Moderate	15-20
*E12-25	Calculate goodwill.	Simple	10-15
*E12-26	Calculate fair value of identifiable assets	Moderate	15-20
P12-1	Accounting for intangible-type expenditures.	Moderate	25-35
P12-2	Accounting for franchise, patents, and trademark.	Moderate	20-30
P12-3	Comprehensive problems on intangibles.	Complex	50-70
P12-4	Correct intangible asset account.	Moderate	20-25
P12-5	Accounting for R&D costs and patent.	Moderate	20-25
P12-6	Revaluation model.	Moderate	30-40
P12-7	Comprehensive intangible and impairment.	Moderate	30-40
P12-8	Comprehensive intangible and impairment - IFRS.	Moderate	15-20
P12-9	Determine useful life of intangibles.	Moderate	25-30
P12-10	Calculation of goodwill and impairment.	Moderate	20-25

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
P12-11	Comprehensive goodwill impairment - IFRS.	Moderate	15-20
*P12-12	Calculate goodwill and company value.	Moderate	20-25
*P12-13	Valuing goodwill.	Moderate	25-30

SOLUTION TO BRIEF EXERCISES

BRIEF EXERCISE 12-1

a) Intangible assets likely include:

- 1. Purchased trademark “Healthy Originals” and its related internet domain name**
- 2. Purchased patented cookie recipes**
- 3. Expenditures related to infrastructure and graphical design development of company website.**

b) All of the company’s most important assets are intangible assets, including the “Healthy Originals” trademark, the patented cookie recipes, and the company’s website. The intangible assets help to protect the revenues of the business by allowing the company to sell a unique product (cookies produced from a patented recipe), under a unique brand name (“Healthy Originals”), and through a unique website (www.healthyoriginals.com).

c) The intangible assets meet the definition of an asset because they involve present economic resources, and the company has control over their future benefits and can restrict others’ access. Recording of intangible assets on the company’s balance sheet provides users with relevant and faithfully representative information about the company’s expected future economic benefits, as well as financial statements that are free from error or bias.

BRIEF EXERCISE 12-2

- a) This should not be an intangible asset because while the software lacks physical substance and is non-monetary, it cannot be identifiable as a separate component from the manufacturing machine. Generally, if the software is needed for the physical component to operate, it is treated as an item of property, plant and equipment.**
- b) This software fulfills the three criteria because it is identifiable and separable from the related computer hardware, it lacks physical substance, and is non-monetary.**
- c) Expenditures on this software would be subject to the criteria for internally developed intangible assets. All expenditures incurred during the research phase would be expensed. Only expenditures incurred after the six required conditions are met in the development phase can be recognized as an intangible asset – software product development costs. These costs would meet the three criteria for intangible assets as opposed to property, plant and equipment since they lack physical substance, are non-monetary and are identifiable. When the software product enters the production process, the development costs that met the capitalization criteria are amortized into Inventory, most likely over the number of units produced.**
- d) This item represents inventory, not an intangible asset. Remember, as discussed in Chapter 8, items purchased for resale to customers are inventory. Intangible assets are not held for sale, but rather are used by the business to facilitate its operations.**

BRIEF EXERCISE 12-3

- (a) Expense as salaries and wages expense**
- (b) Capitalize if the development phase criteria for capitalization are all met; else expense**
- (c) Expense as advertising expense**
- (d) Expense as selling expenses**
- (e) Expense as research and development expense**
- (f) If reporting under ASPE, depending on the company's accounting policy, expense or capitalize when the six development stage criteria for capitalization are met. If reporting under IFRS, capitalize when the six development stage criteria for capitalization are met.**

BRIEF EXERCISE 12-4

Copyright No. 1 for \$18,000 should be capitalized. Its carrying value on the December 31, 2014 balance sheet would be \$16,000 [$\$18,000 - (\$18,000 \times \frac{1}{3} \times \frac{4}{12})$].

Copyright No. 2 for \$29,400 should be capitalized. Since it has an indefinite useful life it would not be amortized. It would be reflected on the December 31, 2014 balance sheet at its cost of \$29,400.

BRIEF EXERCISE 12-5

Intangible Assets – Trademarks (\$44,000 X 3.60478).....	158,610
Notes Payable (*).....	158,610

Using a financial calculator (assuming payments are made at the end of each year):

PV	?	Yields \$158,610
I	12%	
N	5	
PMT	\$(44,000)	
FV	-	
Type	0	

Excel formula: =PV(rate,nper,pmt,fv,type)

(*) the note payable is presented net of the discount of \$61,390

BRIEF EXERCISE 12-6

	Carrying Amount	Life in Months	Amort. Per Month	Months Amort.
Patent (1/1/14)	\$365,000	96	\$3,802	12
Legal cost (12/1/14)	<u>106,000</u>	85	\$1,247	1
	<u>\$471,000</u>			

Carrying amount	\$471,000
Less: Amortization Patent (12 X \$3,802)	(45,624)
Legal costs (1 X \$1,247)	<u>(1,247)</u>
Carrying amount 12/31/14	<u>\$424,129</u>

The accounting for the research expense of \$140,000 is very clear in that no costs incurred on research or in the research phase of an internal project meet the criteria for recognition as an asset.

An intangible asset can only be recognized from the development phase of an internal project when the six criteria for capitalization are met.

Therefore, the research costs of \$140,000 must be expensed in the period, because they were incurred before the required criteria for capitalization were fulfilled.

BRIEF EXERCISE 12-7

Intangible Assets - Software (New)	7,620*	
Loss on Disposal of Intangible Assets	1,100	
Cash		7,620
Intangible Assets - Software (Old)		1,100
* \$5,900 + \$1,720 = \$7,620		

Specifically excluded as capitalized costs are selling, administrative, and other general overhead costs that cannot be directly linked to preparing the asset for use, and costs incurred to train employees. These would be expensed as period costs.

BRIEF EXERCISE 12-8

- (a) Capitalized.
- (b) Expensed.
- (c) Expensed.
- (d) Expensed.
- (e) Capitalized.
- (f) Expensed.
- (g) Expensed.
- (h) Expensed.

BRIEF EXERCISE 12-9

As a private company applying ASPE, Swinson has the option to either recognize all costs of internally generated intangible assets as an expense or to recognize the costs as an internally generated intangible asset when the six development phase criteria for capitalization are met.

If Swinson chooses to expense, all costs incurred will be expensed as research and development activities.

Research and Development Expense	161,000	
Cash		161,000
(\$45,000 + \$15,000 + \$2,000* + \$72,000 + \$15,000 + \$12,000)		

If Swinson chooses to capitalize, all costs incurred after March, 2014 will be capitalized. The costs incurred prior to the date the required criteria were met must be expensed as research and development expense.

Intangible Assets - Development Costs	134,000	
Research and Development Expense		
(\$15,000 + \$12,000)	27,000	
Cash		161,000
(\$45,000 + \$15,000 + \$2,000*+ \$72,000) = \$134,000		

*Under ASPE, interest costs directly attributable to the acquisition, construction or development of an intangible asset, once it meets the criteria to be capitalized, may be capitalized or expensed depending on the company's accounting policy for borrowing costs.

BRIEF EXERCISE 12-9 (Continued)

If Swinson was a public company following IFRS, all costs associated with the development of internally generated intangible assets would be capitalized when the six development phase criteria for capitalization are met. The costs incurred prior to the date the required criteria were met would be expensed as research and development expense.

Intangible Assets - Development Costs	134,000	
Research and Development Expense		
(\$15,000 + \$12,000)	27,000	
Cash		161,000
(\$45,000 + \$15,000 + \$2,000 + \$72,000) = \$134,000		

BRIEF EXERCISE 12-10

The asset purchase would be capitalized using the relative fair value method. The assets should be separated so that the amortization expense can be determined based on each asset's useful life.

	Fair Value	% of Total	X Cost	=	Recorded Amount (rounded)
Trade Name	\$280,000	28/89	\$800,000		\$251,685
Customer List	290,000	29/89	800,000		260,674
Manuf. Equip.	320,000	32/89	800,000		287,641
	<u>\$890,000</u>				<u>\$800,000</u>

Intangible Assets - Trade Names	251,685	
Intangible Assets - Customer Lists.....	260,674	
Equipment.....	287,641	
Cash		800,000

Specifically excluded are initial operating losses after the assets have been put into use.

BRIEF EXERCISE 12-11

Specifically excluded as capitalized costs are selling, administrative, and other general overhead costs that cannot be directly linked to preparing the asset for use, and costs incurred to train employees. Costs incurred to promote or launch products must also be expensed as period costs.

BRIEF EXERCISE 12-12

Amortization Expense = \$980,000 X (380,000 / (1,560,000 + 380,000)) = \$191,959.

An “activity” approach proportional method may be used to reflect the pattern in which the software benefits were delivered. The rate is determined using the pattern of revenues from the use of the software.

BRIEF EXERCISE 12-13

Intangible Assets - Patents.....	87,000	
Cash		87,000
Amortization Expense.....	5,438	
Accumulated Amortization - Patents		5,438
(\$87,000 X 1/16 = \$5,438 (rounded))		

BRIEF EXERCISE 12-14

Intangible Assets - Patents.....	26,000	
Cash		26,000
Amortization Expense.....	14,589	
Accumulated Amortization - Patents		14,589
[(\$87000 – \$5,438 – \$5,438 + \$26,000) X 1/7 = \$14,589]		

BRIEF EXERCISE 12-15

- (a) It is probable that the entity will receive the expected future economic benefits, and the cost of the licences can be measured reliably, therefore the recognition criteria for intangible assets are met and the licences are capitalized:

December 31, 2014

Intangible Assets – Licences	10,000	
Cash.....		10,000
10 X \$1,000 = \$10,000		

- (b) If Convenient Cabs follows ASPE, the licences are accounted for under the Cost Model, which measures the licences after acquisition at their cost less accumulated amortization and any accumulated impairment losses.
- (c) Under IFRS, intangible assets are accounted for under the Cost Model or the Revaluation Model; however, the Revaluation Model can only be applied to intangible assets that have a fair value determined in an active market. There is an active market for taxi licences in Somerdale, therefore Convenient Cabs may account for the licences either under the Cost Model or the Revaluation Model. The Cost Model would measure the licences after acquisition at their cost less accumulated amortization and any accumulated impairment losses. The Revaluation Model would measure the licences after acquisition at their fair value at the date of revaluation less any subsequent accumulated amortization and any subsequent impairment losses.

BRIEF EXERCISE 12-16

Under ASPE, the cost recovery impairment model for limited-life intangible assets would apply in this case. The undiscounted future cash flows are first compared to the carrying amount. If undiscounted future cash flows < carrying amount, the asset is impaired, and the impairment loss is calculated as the difference between the asset's carrying amount and fair value.

Undiscounted future cash flows (\$125,000) > Carrying amount (\$83,750), therefore the asset is not considered to be impaired.

BRIEF EXERCISE 12-17

Under IFRS, the rational entity impairment model would apply. If carrying amount > recoverable amount (where recoverable amount is the higher of value in use and fair value less costs to sell), the impairment loss is calculated as the difference between carrying amount and recoverable amount.

In this case, the recoverable amount is \$95,200 (because value in use is higher than the fair value less costs to sell), and there is no impairment loss as the carrying amount of \$83,750 does not exceed the recoverable amount of \$95,200.

BRIEF EXERCISE 12-18

- a) Under ASPE, for indefinite-life intangible assets, the impairment test is a comparison of carrying amount with the asset's fair value, where impairment loss is equal to the difference when fair value is lower. Carrying amount (\$83,750) > fair value (\$45,000), therefore the trademark is impaired and impairment loss is calculated as \$38,750 (\$83,750 - \$45,000).
- b) Under IFRS, the rational entity impairment model applies. There is no impairment loss as the carrying amount of \$83,750 does not exceed the recoverable amount of \$95,200 (where recoverable amount is the higher of value in use and fair value less costs to sell).

BRIEF EXERCISE 12-19

Fair value of consideration transferred		\$863,000
Fair value of assets	\$1,160,000	
Less fair value of liabilities	<u>(460,000)</u>	
Fair value of net assets		<u>700,000</u>
Value assigned to goodwill		<u><u>\$163,000</u></u>

BRIEF EXERCISE 12-20

Under IFRS, the recoverable amount of the CGU is compared with its carrying amount to determine if there is any impairment.

Based on the information provided, the recoverable amount of the CGU is the greater of:

- Fair value less costs to sell = \$3,450,000
- Value in use = \$3,850,000

Recoverable amount of CGU	\$3,850,000
Carrying amount of CGU	\$3,925,000

The goodwill is impaired because carrying amount of the CGU > recoverable amount of the CGU. The goodwill impairment loss is \$75,000 (\$3,925,000 - \$3,850,000).

BRIEF EXERCISE 12-21

Under ASPE, goodwill is assigned to a reporting unit at the acquisition date. Goodwill is tested for impairment when events or changes in circumstances indicate impairment may exist.

There is an impairment loss if the carrying amount of the reporting unit (including goodwill) exceeds the fair value of the reporting unit.

Carrying amount of unit	\$3,613,000
Fair value of unit	<u>\$3,550,000</u>
Impairment loss	<u>\$63,000</u>

A reversal of an impairment loss on goodwill is not permitted.

***BRIEF EXERCISE 12-22**

Average earnings [(\$750,000 – \$94,000) X 1/5]	\$131,200
Normal earnings (\$690,000 X 15%)	<u>(103,500)</u>
Excess earnings	27,700
Capitalization rate	<u>20%</u>
Estimated goodwill	<u>\$138,500</u>

SOLUTIONS TO EXERCISES

EXERCISE 12-1 (15-20 minutes)

- (a) 3, 10, 15, 16, 17, 19, 20*, 23, 25**, 26*****
- (b)**
- 1. Long-term investments on the statement of financial position.**
 - 2. Biological asset on the statement of financial position.**
 - 4. Current asset (prepaid rent) on the statement of financial position.**
 - 5. Property, plant, and equipment on the statement of financial position.**
 - 6. Research and development expense on the income statement.**
 - 7. Expensed on the income statement**
 - 8. Operating losses on the income statement.**
 - 9. Expensed on the income statement**
 - 11. Not recorded; any costs incurred related to creating goodwill internally must be expensed.**
 - 12.* Research and development expense on the income statement.**
 - 13. Goodwill should be shown as a separate line item on the statement of financial position.**
 - 14. Research and development expense on the income statement.**
 - 18. Research and development expense on the income statement.**
 - 21. Long-term investments, or other assets, on the statement of financial position.**
 - 22. Expensed on the income statement.**
 - 24. Expensed on the income statement.**

EXERCISE 12-1 (Continued)

*** Capitalized as development costs only if they meet all six development phase criteria for capitalization. See further discussion under part (c)**

**** Intangible asset to the extent a lump sum was paid in advance to secure the contract since it is identifiable, separable (as based on a contractual period), lacks physical substance and is non-monetary. The intangible asset is then amortized as the services are provided. Note that if monies were paid under the contract over the contract period, they would be recognized as normal advertising and promotion costs which are expensed as period costs.**

*****Treatment of borrowing costs differs between IFRS and ASPE. See further discussion under part (c)**

(c) There are differences with respect to capitalization of borrowing costs and capitalization of research and development costs:

- **Under IFRS, borrowing costs that are directly attributable to the acquisition, construction or development of qualifying intangible assets are capitalized, once the six development phase criteria are met. Under ASPE, interest costs directly attributable to the acquisition, construction or development of an intangible asset may be capitalized or expensed depending on the entity's accounting policy, once the six development phase capitalization criteria are met.**
- **Under ASPE, costs associated with development of internally generated intangible assets that meet the six criteria in the development stage, may be capitalized or expensed, depending on the entity's accounting policy. There is no accounting policy choice under IFRS (under IFRS, costs associated with the development of internally generated intangible assets are capitalized when the six criteria in the development stage are met).**

EXERCISE 12-2 (10-15 minutes)

The following items would be classified as intangible assets:

Cable Television Franchises

Film Contract Rights

Music Copyrights

Customer Lists acquired in a business combination

Goodwill *

Covenants Not To Compete

Brand Names

In-Process R&D acquired in a business combination**

An intangible for customer lists usually results from a company purchasing a list from another party.

A covenant not to compete may arise when a company pays another company a fee to ensure that the company does not compete in a given area.

Other items:

Cash, accounts receivable, notes receivable due within one year from balance sheet date, and prepaid expenses would be classified as current assets.

Property, plant, and equipment, and land would be classified as non-current assets in the tangible property, plant, and equipment section.

Leasehold improvements are generally shown in the tangible property, plant, and equipment section, although some accountants classify them as intangible assets. The rationale for intangible asset treatment is that the improvements revert to the lessor at the end of the lease and therefore are more of a right than a tangible asset.

Investments in affiliated companies would be classified as part of the investments section on the balance sheet.

EXERCISE 12-2 (Continued)

Research costs, organization cost, and the annual franchise fee would be classified as operating expenses.

Discount on notes payable is shown as a deduction from the related notes payable on the balance sheet.

***The excess of purchase price over fair value of identifiable net assets of X Corp. is the amount assigned to goodwill in a business combination.**

****In-process R&D is recognized as an intangible asset when it is acquired as part of a business combination.**

EXERCISE 12-3 (10-15 minutes)

(a)	Development phase activities	29,000
	Trademarks	<u>17,500</u>
	Total intangible assets	<u>\$46,500</u>

- (b)** Excess of cost over fair value of net assets of acquired subsidiary – Goodwill, \$81,000, should be shown as a separate line item on the balance sheet.

Discount on bonds payable, \$23,000, should be reported net with the bonds payable in the long-term liabilities section.

Deposits with advertising agency for ads to promote goodwill of company, \$8,000, should be reported either as an expense or as prepaid advertising in the current assets section. Advertising costs in general are expensed when incurred or when first used.

Cost of equipment acquired for research and development projects, \$125,000, should be reported with property, plant, and equipment. Even if it was to be used only with a specific project, because it would be used over a number of periods, it would be capitalized and depreciated as a research and development expense over the period of use.

Costs of researching a secret formula for a product that is expected to be marketed for at least 20 years (\$75,000) should be expensed as part of Research and Development Expense. Development expenses are expensed unless all six criteria for capitalization are met.

The payment for a favourable lease is a long-term prepayment and should be shown in the non-current assets section.

Organization costs of \$34,000 are a period cost and expensed in the income statement.

EXERCISE 12-4 (15-20 minutes)

- (a) At December 31, 2014, Mount Olympus should report the patent at \$1,080,000 (\$1,800,000 net of \$720,000 accumulated amortization) on the balance sheet. The calculation of accumulated amortization is as follows.

Amortization for 2012 and 2013:	
(\$1,800,000/10) X 2	\$360,000
2014 amortization:	
(\$1,800,000 – \$360,000) , (6–2)	<u>360,000</u>
Accumulated amortization, 12/31/14	<u>\$720,000</u>

- (b) Mount Olympus should amortize the franchise over 25 years, the period of identifiable cash flows. Even though the franchise is perpetual the company believes it will generate future economic benefits for only 25 years. The amount of amortization of the franchise for the year ended December 31, 2014, is \$26,000: (\$650,000/25).
- (c) Unamortized development costs would be reported as \$150,000 (\$375,000 net of \$225,000 accumulated amortization) at December 31, 2014.

Amortization for 2012, 2013, and 2014:	
(\$375,000/5) X 3	\$225,000

EXERCISE 12-5 (15-20 minutes)

Research and Development Expense	1,050,000	
Intangible Assets - Development Costs .	215,000	
Intangible Assets - Patents.....	45,000	
Rent Expense [(5 , 7) X \$49,000].....	35,000	
Prepaid Rent [(2 , 7) X \$49,000]	14,000	
Advertising Expense.....	157,000	
Income Summary	316,000	
Discount on Bonds Payable	13,125*	
Interest Expense	875	
Common Shares.....		310,000
Intangible Assets		1,536,000

* Assuming straight-line amortization:

$$(\$14,000 , 48 \text{ months}) \times 3 = \$875; \$14,000 - \$875 = \$13,125$$

Amortization Expense.....	2,250	
Accumulated Amortization - Patents		2,250
[(\\$45,000 , 10) X 1/2]		

EXERCISE 12-6 (15-20 minutes)

a) Journal entry to classify into proper accounts

Intangible Assets - Patents.....	320,000	
Goodwill.....	310,000	
Intangible Assets - Franchises.....	250,000	
Research and Development Expense.....	260,000*	
Intangible Assets – Copyrights.....	140,000	
Advertising Expense.....	33,000	
Intangible Assets - Trademarks	15,000	
Intangible Assets - Customer Lists.....	10,000	
Intangible Assets		1,338,000

* \$239,000 + \$21,000 = \$260,000

b) Year-end amortization

Amortization Expense.....	68,333	
Accumulated Amortization – Intangible Assets - Patents		40,000
Accumulated Amortization – Intangible Assets - Franchises		12,500
Accumulated Amortization – Intangible Assets - Copyrights		11,667
Accumulated Amortization – Intangible Assets - Trademarks		2,083
Accumulated Amortization – Intangible Assets - Customer Lists ..		2,083

Amortization Expense:

Patents: $\$320,000/8 = \$40,000$

Franchise: $\$250,000/10 \times 6/12 = \$12,500$

Copyright: $\$140,000/5 \times 5/12 = \$11,667$

Trademarks: $\$15,000/3 \times 5/12 = \$2,083$

Customer lists: $\$10,000/2 \times 5/12 = \$2,083$

EXERCISE 12-6 (15-20 minutes)

c) Carrying amounts of intangible assets as of December 31, 2014:

Patents =	\$320,000 – \$40,000	= \$280,000
Franchises =	\$250,000 – \$12,500	= \$237,500
Copyrights =	\$140,000 – \$11,667	= \$128,333
Trademarks =	\$15,000 – \$2,083	= \$12,917
Customer Lists =	\$10,000 – \$2,083	= \$7,917

Goodwill of \$310,000 would be shown as a separate line item on the statement of financial position.

EXERCISE 12-7 (25-30 minutes)

- (a) Variables to consider in determining the appropriate amortization period for a limited-life intangible include:
- The legal life of the trade name (15 years in Canada) - the registration is renewable which could extend the legal life indefinitely;
 - The expected use of the trade name by the company;
 - The effects of demand, competition and other economic factors;
 - The period over which its benefits are expected to be provided.
- (b) 2014 amortization: $\$45,000 \div 15 = \underline{\$3,000}$.
12/31/14 carrying amount: $\$45,000 - \$3,000 = \underline{\$42,000}$.
- 2015 amortization: $(\$42,000 + \$24,300) \div 14 = \underline{\$4,736}$.
12/31/15 carrying amount: $\$42,000 + \$24,300 - \$4,736 = \underline{\$61,564}$.
- (c) 2014 amortization: $\$45,000 \div 5 = \underline{\$9,000}$.
12/31/14 carrying amount: $\$45,000 - \$9,000 = \underline{\$36,000}$.
- 2015 amortization: $(\$36,000 + \$24,300) \div 4 = \underline{\$15,075}$.
12/31/15 carrying amount: $\$36,000 + \$24,300 - \$15,075 = \underline{\$45,225}$.
- (d) If indefinite life:
- Do not amortize if determined to have an indefinite life.
 - Indefinite does not mean infinite life. If classified as indefinite life, management should review to ensure that conditions and circumstances continue to support the indefinite life assessment. This assessment is required on an annual basis. If there is a change in the useful life assessed, it will be accounted for prospectively as a change in estimate.

EXERCISE 12-7 (Continued)

- (e) A longer estimate of useful life (as was assumed in part (b)) results in lower amortization expense on the income statement and higher carrying amount on the balance sheet each period, compared to a shorter estimate of useful life (as was assumed in part (c)). If the trade name is estimated to have an indefinite life, no expense is recorded each period and the carrying amount of the trade name will be equal to original cost, unless the trade name is determined to be impaired.**

The estimated useful life of the trade name should be based on neutral and unbiased consideration of the factors discussed in part (a). A potential investor in Kara should be aware that the estimate of useful life requires a degree of professional judgement, and that the determination of useful life can have a material effect on the balance sheet as well as the income statement.

EXERCISE 12-8 (10-15 minutes)

(a)

Depreciation of equipment acquired

for use in research and development	
projects over the next 5 years (\$240,000 , 5)	\$ 48,000
Materials consumed in research projects	61,000
Consulting fees paid to outsiders for research and	
development projects (\$95,000 - \$4,500)	90,500
Personnel costs of persons involved in research and	
development projects	108,000
Indirect costs reasonably allocable to research and	
development projects	<u>25,000</u>
Total to be expensed in 2014 for Research and	
Development	<u>\$332,500</u>

Note that the cost of the materials consumed in the development of a product committed for manufacturing in the first quarter of 2015 and the consulting fees related to the materials are likely costs incurred after the six development phase criteria have been met. As such, they would be charged to an intangible asset account such as Product Development Costs that would be amortized over the periods benefitting.

(b) Treatment of training costs and borrowing costs incurred after the six development phase criteria are met:

- Training costs relate to selling activities and should not be categorized as research and development activities. If these costs were incurred after the six development phase criteria for capitalization were met, they would not be capitalized because they are not direct costs of creating, producing and preparing the asset to operate in the way intended by management.
- Under IFRS, borrowing costs that are directly attributable to the acquisition, construction or development of a qualifying intangible asset are capitalized once the required capitalization criteria are fulfilled.

EXERCISE 12-8 (Continued)

- **Under ASPE, interest costs directly attributable to the acquisition, construction or development of an intangible asset may be capitalized or expensed depending on the entity's accounting policy for internally generated assets and the entity's policy on capitalization of interest costs.**

EXERCISE 12-9 (25-30 minutes)

(a) **Fiscal 2014:** The \$392,000 is a research and development cost that should be charged to R & D Expense and, if not separately disclosed on the income statement, total R & D Expense should be separately disclosed in the notes to the financial statements. These costs are not eligible for capitalization since the six development phase criteria for capitalization are not met.

(b) **Fiscal 2015:**

Research and Development Expense.....	71,000	
Cash, Accts. Payable, etc.....		71,000
(To record research and development expense)		

Assuming the criteria are not fulfilled for the development phase

Intangible Assets - Patents	10,000	
Cash, Accts. Payable, etc.....		10,000
(To record legal and admin. costs incurred to obtain patent)		

Amortization Expense	2,000	
Accumulated Amortization – Intangible Assets - Patents		2,000
[To record one year's amortization expense (\$10,000 ÷ 5 = \$2,000)]		

EXERCISE 12-9 (Continued)

(c) Fiscal 2016:

Intangible Assets - Patents	12,400	
Cash, Accts. Payable, etc.....		12,400
(To record legal cost of successfully defending patent)		
Amortization Expense	2,550	
Accumulated Amortization – Intangible Assets - Patents.....		2,550
To record one year's amortization expense:		
\$10,000 – \$2,000 = \$8,000;		
\$8,000 , 8 =	\$1,000	
\$12,400 , 8 =	<u>1,550</u>	
Amortization expense for 2016	<u>\$2,550</u>	

The cost of defending the patent is capitalized because the defence was successful and because it extended the useful life of the patent.

(d) Pre Sept 2016:

Under IFRS, costs associated with the development of internally generated intangible assets are capitalized when the six specific criteria for capitalization are met in the development stage. As such, costs incurred before the future benefits are reasonably certain (i.e. before the six specific criteria for capitalization are met) must be expensed. The \$101,000 must be expensed as it was incurred before the future benefits were reasonably certain (i.e. these expenditures helped to establish the existence of future benefits).

Research and Development Expense	101,000	
Cash, Accts. Payable, etc.		101,000
(To record research and development phase costs)		

EXERCISE 12-9 (Continued)

Post Sept 2016:

Costs incurred after the six specific criteria for capitalization are met, are capitalized. Therefore, assuming after incurring the \$101,000 costs by early September that the company's intention and ability to generate future economic benefits could also be demonstrated, the \$66,000 would be capitalized as development costs.

Intangible Assets - Development Costs	66,000	
Cash, Accts. Payable, etc.		66,000
(To record costs meeting the capitalization criteria – to be amortized over periods benefitting after manufacturing begins)		

EXERCISE 12-10 (15-20 minutes)

(a) **PrideTalk Corp.**
INTANGIBLES SECTION OF BALANCE SHEET
December 31, 2014

Patent, net of accumulated amortization (Schedule 1)	\$864,000
Franchise, net of accumulated amortization (Schedule 2)	<u>261,000</u>
Total intangibles	<u><u>\$1,125,000</u></u>

Schedule 1: Calculation of Patent from Marvin Inc.	
Cost of patent at date of purchase	\$1,200,000
Amortization of patent for 2013 (\$1,200,000/10 yrs)	<u>(120,000)</u>
	1,080,000
Amortization of patent for 2014 (\$1,080,000/5 yrs)	<u>(216,000)</u>
Patent balance	<u><u>\$864,000</u></u>

Schedule 2: Calculation of Franchise from Burr Ltd.	
Cost of franchise at date of purchase	\$ 290,000
Amortization of franchise for 2014 (\$290,000 , 10)	<u>(29,000)</u>
Franchise balance	<u><u>\$ 261,000</u></u>

(b) **PrideTalk Corp.**
Income Statement Effect
For the year ended December 31, 2014

Revenue from franchise	\$1,400,000
Expenses:	
Patent from Marvin Inc.:	
Amortization of patent for 2014 (Schedule 1)	216,000
Franchise from Burr Ltd.:	
Amortization of franchise for 2014 (Schedule 2)	\$ 29,000
Payment to Burr Ltd. (\$1,400,000 X 5%)	<u>70,000</u>
	99,000

EXERCISE 12-10 (Continued)

Research and development expense	<u>247,000</u>
Net increase in income	<u><u>\$838,000</u></u>

- (c) If PrideTalk is a public company, the accounting would remain consistent with that provided above. PrideTalk would have additional options under IFRS to use the revaluation model to measure intangible asset(s) after acquisition; however this would only be possible if there is an active market for the intangible asset(s). In addition, under IFRS, an assessment of estimated useful life is required at each reporting date.

Under IFRS, costs associated with the development of internally generated intangible assets that meet the six development phase criteria for capitalization are capitalized (no policy choice). Under ASPE, costs associated with the development of internally generated intangible assets that meet the six development phase criteria for capitalization may be capitalized or expensed, depending on the entity's accounting policy.

EXERCISE 12-11 (25-30 minutes)

(a) Research and Development Expense	1,800,000	
Cash.....		1,800,000
Costs incurred before the development phase criteria for capitalization are fulfilled are not capitalized		
 Intangible Assets - Software	 2,900,000*	
Cash.....		2,900,000
(\$4,700,000 – \$1,800,000)		

*Under ASPE, costs associated with development of internally generated intangible assets that meet the six development phase criteria for capitalization may be capitalized or expensed, depending on the entity's accounting policy.

The journal entry if the accounting policy was to expense all research and development costs would be as follows:

Research and Development Expense	4,700,000	
Cash		4,700,000
 (b) Amortization Expense	 362,500	
Accumulated Amortization –		
Software.....		362,500
(1/8 X \$2,900,000 = \$362,500)		

This assumes the benefits will be received equally over the eight-year period. Alternatively, if revenues are expected to be uneven over the eight years, it might be preferable to amortize the costs on an activity basis – either on a per unit basis or based on the revenues generated relative to the total revenues expected. In the latter case, amortization expense would amount to $(\$2.7/\$12) \times \$2.9 \text{ million} = \$652,500$.

EXERCISE 12-11 (Continued)

(c) The software costs should be reported on the 12/31/15 balance sheet at a carrying amount of $\$2,900,000 - \$362,500 = \$2,537,500$ (or of $\$2,900,000 - \$652,500 = \$2,247,500$ using an amortization method based on relative revenue).

(d) Impairment testing for limited-life assets under ASPE

- Under ASPE, the cost recovery impairment model is applied
- Software is a limited-life intangible asset and would be tested for potential impairment whenever events and circumstances indicate the carrying amount may not be recoverable. If there are any indicators of impairment, carrying amount of the asset is compared to undiscounted future net cash flows of the asset, to determine if the asset is impaired. If the asset is impaired, an impairment loss is calculated and recorded as the difference between the asset's carrying amount and its fair value.
- Under ASPE, an impairment loss may not be reversed.

Therefore, if the asset was considered impaired (carrying amount not recoverable), the net realizable value (as an indicator of what its fair value might be) would be valuable information in measuring the amount of the impairment loss.

EXERCISE 12-11 (Continued)

(e) If the company prepares financial statements under IFRS:

- **The rational entity impairment model is applied**
- **At the end of each reporting period, the asset is assessed for indicators of possible impairment. If there are any indicators of possible impairment, the asset is tested for impairment.**
- **If the carrying amount is higher than the recoverable amount (which is the higher of the value in use and the fair value less costs to sell), the asset is impaired and an impairment loss is calculated and recorded as the difference between the asset's carrying amount and its recoverable amount.**
- **Costs associated with development of internally generated intangible assets that meet the six development phase criteria for capitalization are capitalized (no policy choice).**
- **Under IFRS, an impairment loss may be reversed in the future, although the reversal is limited by what the carrying amount of the asset would have been if no impairment had been recognized initially.**

Because the net realizable value (NRV) is, in effect, the asset's fair value less costs to sell, knowing the NRV is one of the variables in determining whether the asset is impaired and the amount of the impairment loss.

EXERCISE 12-12 (20-25 minutes)

(a) August 31, 2014

Administrative Expenses	14,200	
Cash.....		14,200

Application costs are expensed because the related future economic benefits are uncertain.

(b) June 30, 2015

Intangible Assets – Licences	112,000	
Cash.....		112,000
32 X \$3,500 = \$112,000		

(c) Cost model

December 31, 2016, 2017, 2018

Amortization expense.....	22,400	
Accumulated Amortization - Licences		22,400
\$112,000 / 5 yrs = \$22,400		

Cost of licences at date of purchase	\$112,000
Amortization of licences for 2015 (\$112,000 / 5 yrs X 6/12)	(11,200)
Amortization of licences for 2016-18 (\$112,000 / 5 yrs X 3)	<u>(67,200)</u>
Carrying amount of Licences, as at December 31, 2018	<u>\$33,600</u>

EXERCISE 12-12 (Continued)

Under IFRS, the licences would be tested for impairment using the rational entity impairment model:

As at December 31, 2018:

Carrying amount of the licences (\$112,000 - \$11,200 – (\$22,400 X 3 yrs))	\$33,600

Recoverable amount of the licences (higher of value in use \$6,200 X 32 and fair value less costs to sell (((\$1,400 - \$200) X 32))	\$198,400

Recoverable amount exceeds carrying amount, therefore no impairment loss in 2018.

(d) Revaluation model
(Asset adjustment method)

December 31, 2016		
Amortization expense.....	22,400	
Accumulated Amortization -		
Licences		22,400
\$112,000 / 5 yrs = \$22,400		

Accumulated Amortization		
- Licences	33,600	
Intangible Assets - Licences		33,600
\$11,200 + \$22,400 = \$33,600		

The Intangible Assets – Licences account is now (\$112,000 - \$33,600 =) \$78,400, and the related Accumulated Amortization account is zero.

EXERCISE 12-12 (Continued)

Intangible Assets - Licences	56,000	
Revaluation Surplus (OCI)		56,000
\$4,200 X 32 - \$78,400 = \$56,000		

Carrying amount of Intangible Assets - Licences as at December 31, 2016 = \$134,400 (\$4,200 X 32 or \$78,400 + \$56,000).

December 31, 2017

Amortization expense	38,400	
Accumulated Amortization -		
Licences		38,400
\$134,400 / 3.5 yrs = \$38,400		

December 31, 2018

Amortization expense	38,400	
Accumulated Amortization -		
Licences		38,400

Accumulated Amortization -		
Intangible Assets - Licences	76,800	
Intangible Assets - Licences		76,800
\$38,400 + \$38,400 = \$76,800		

The Intangible Assets – Licences account is now (\$134,400 - \$76,800 =) \$57,600, and the related Accumulated Amortization account is zero.

Revaluation Surplus (OCI)	12,800	
Intangible Assets – Licences		12,800
\$57,600 - (\$1,400 X 32) = \$12,800		

EXERCISE 12-12 (Continued)

Under IFRS, the licences would be tested for impairment using the rational entity impairment model:

As at December 31, 2018:

Carrying amount of the licences (\$57,600 - \$12,800) OR (\$1,400 X 32)	\$44,800

Recoverable amount of the licences (higher of value in use \$6,200 X 32 and fair value less costs to sell (((\$1,400 - \$200) X 32))	\$198,400

Recoverable amount exceeds carrying amount, therefore no impairment loss in 2018.

- (e) The revaluation model can only be applied to intangible assets that have a fair value determined in an active market. To verify that there is an active market for an intangible asset, an auditor would verify that the items are homogenous (interchangeable), that there is a good supply of willing buyers and sellers, and that the prices are available to the public. In this case, the taxi licences are interchangeable (e.g. they do not expire), and there appears to be a good supply of willing buyers and sellers. Assuming that the prices of the taxi licences are freely available to the public (e.g. through a central posting system), there would be an active market for the taxi licences and they could be measured using the revaluation model.

EXERCISE 12-13 (20-25 minutes)

- (a) Under IFRS, the recoverable amount is the higher of value in use and fair value less costs to sell (both of which are discounted amounts). In this case, the licence is impaired at the end of 2014 since:

Recoverable amount of \$475,000 < Carrying amount of \$530,000.
The impairment loss of \$55,000 would be recorded.

The journal entry under IFRS would be:

Dr. Loss on Impairment	55,000	
Cr. Accumulated Impairment		
Losses—Intangible Assets - Licences		55,000

- (b) If the estimates used to determine the asset's value in use and fair value less costs to sell have changed, then a reversal of the impairment is recognized. The reversal amount, however, is limited. The specific asset cannot be increased in value to more than what its carrying amount would have been, net of amortization, if the original impairment loss had never been recognized. The carrying amount would have been \$530,000 - \$53,000 = \$477,000.

In this case, there would be a reversal since the
Recoverable amount of \$450,000 > Carrying amount of \$427,500*
* Carrying amount at end of 2015 = 475,000 – 47,500 [amortization 475,000/10] = \$427,500

Therefore carrying amount can be increased to \$450,000.
Reversal = 450,000 – 427,500 = \$22,500.

Accumulated Impairment Losses – Licences	22,500	
Recovery of Loss from Impairment		22,500

EXERCISE 12-13 (Continued)

(c) If the licence's fair value is \$500,000 at the end of 2015, the recoverable amount at the end of 2015 would be \$500,000 (since recoverable amount is the higher of value in use and fair value less costs to sell). However, the licence cannot be increased in value to more than what its carrying amount would have been, net of amortization, if the original impairment loss had never been recognized (i.e. \$530,000 – \$53,000 amortization = \$477,000).

Therefore carrying amount can be increased to \$477,000.

Reversal = \$477,000 – \$427,500 = \$49,500.

Accumulated Impairment Losses – Licences	49,500	
Recovery of Loss from Impairment		49,500

EXERCISE 12-14 (10-15 minutes)

(a) Under ASPE, for a limited-life asset, the undiscounted future cash flows are compared to the carrying amount. In this case, there is no impairment loss under ASPE since:

Recoverable amount (undiscounted future cash flows) of \$535,000 > Carrying amount of \$530,000

(b) Recoverable amount (undiscounted future cash flows) of \$500,000 > Carrying amount of \$477,000 (\$530,000 – \$53,000 amortization) at the end of 2015, therefore there is no impairment loss under ASPE. In any case, reversal of impairment loss is not permitted under ASPE.

(c) The answer to part (b) would not change if the licence's fair value is \$500,000 because under ASPE, the impairment test compares carrying amount of the asset to undiscounted future cash flows. The impairment test is not affected by fair value of the licence.

EXERCISE 12-15 (20-25 minutes)

- (a) Under IFRS, indefinite-life intangible assets are tested for impairment annually (even if there is no indication of impairment), using the Rational Entity Impairment Model (the same test as for limited-life intangible assets). In this case, the licence is impaired at the end of 2014 since:

Recoverable amount of \$475,000 < Carrying amount of \$530,000.

The impairment loss of \$55,000 would be recorded.

The journal entry under IFRS would be:

Dr. Loss on Impairment	55,000
Cr. Accumulated Impairment	
Losses - Licences	55,000

- (b) If the estimates used to determine the asset's value in use and fair value less costs to sell have changed, then a reversal of the impairment is recognized if the recoverable amount exceeds the carrying amount. The reversal amount, however, is limited. The specific asset cannot be increased in value to more than what its carrying amount would have been, if the original impairment loss had never been recognized.

However, in this case, there is no reversal since the recoverable amount (\$450,000) does not exceed the carrying amount (\$475,000).

Since this asset has an indefinite life, in 2015 there is further impairment since:

Recoverable amount of \$450,000 < Carrying amount of \$475,000.

EXERCISE 12-15 (Continued)

An impairment loss of \$25,000 would be recorded.

The journal entry under IFRS would be:

Dr. Loss on Impairment	25,000
Cr. Accumulated Impairment	
Losses - Licences	25,000

- (c) If the licence's fair value is \$500,000 at the end of 2015, the recoverable amount at the end of 2015 would be \$500,000 (since recoverable amount is the higher of value in use and fair value less costs to sell). The licence cannot be increased in value to more than what its carrying amount would have been, if the original impairment loss had never been recognized (i.e. \$530,000).

Therefore carrying amount can be increased to \$500,000.

Reversal = \$500,000 – \$450,000 = \$50,000.

Accumulated Impairment Losses – Licences	50,000
Recovery of Loss from Impairment	50,000

EXERCISE 12-16 (10-15 minutes)

- (a) Under ASPE, indefinite-life intangible assets are tested for impairment when circumstances indicate that the asset may be impaired. However, the test differs from the test for limited-life assets. A fair value test is used, and an impairment loss is recorded when the carrying amount exceeds the fair value of the intangible asset. In this case, the licence is impaired at the end of 2014 since:

Fair value of \$425,000 < Carrying amount of \$530,000.
The impairment loss of \$105,000 would be recorded.

The journal entry under ASPE would be:

Dr. Loss on Impairment	105,000	
Cr. Accumulated Impairment		
Losses - Licences		105,000

- (b) Under ASPE, the recoverable amount refers to undiscounted future cash flows, which does not affect the impairment test for indefinite-life intangible assets.
- (c) Under ASPE, reversal of impairment losses is not permitted.

EXERCISE 12-17 (15-20 minutes)

(a)	December 31, 2014	
	Loss on Impairment.....	550,000*
	Accumulated Impairment Losses -	
	 Copyrights	550,000

Since the carrying amount of the copyright exceeds the undiscounted future cash flows there is impairment. The impairment loss is calculated as follows:

*Carrying amount	\$2,150,000
Fair value	<u>1,600,000</u>
Loss on impairment	<u><u>\$550,000</u></u>

(b)	Amortization Expense	160,000*
	Accumulated Amortization -	
	 Copyrights	160,000

*New carrying amount	\$1,600,000
Useful life	<u>10 years</u>
Amortization per year	<u><u>\$ 160,000</u></u>

- (c) No entry is necessary. Reversal of impairment losses is not permitted under ASPE.
- (d) The copyright would be tested for impairment after the adjusting entry for amortization is recorded. The regular amortization calculation should be done first, prior to testing for impairment. The amortization expense would be shown as part of operating expenses (or as part of a product cost) whereas the impairment loss would be shown as part of other expenses and losses. Amortization expense is a recurring annual expense whereas impairment loss is only recorded when the asset is impaired.

EXERCISE 12-18 (15-20 minutes)

- (a) Under IFRS, the recoverable amount is the higher of value in use and fair value less costs to sell (both of which are discounted amounts). In this case, the copyright is impaired at the end of 2014 since:

Recoverable amount of \$1,850,000 < Carrying amount of \$2,150,000.

The impairment loss of \$300,000 would be recorded.

The journal entry under IFRS would be:

Dr. Loss on Impairment	300,000	
Cr. Accumulated Impairment		
Losses – Copyrights		300,000

- (b) Amortization for 2015 will be based on the new carrying amount of \$1,850,000, divided over the remaining useful life of 10 years:

Amortization Expense.....	185,000	
Accumulated Amortization –		
Copyrights		185,000

EXERCISE 12-18 (Continued)

(c)

Reversal of impairment under IFRS:

If the estimates used to determine the asset's value in use and fair value less costs to sell have changed, then a reversal of the impairment is recognized if the recoverable amount exceeds the carrying amount. The reversal amount, however, is limited. The specific asset cannot be increased in value to more than what its carrying amount would have been, net of accumulated amortization, if the original impairment loss had never been recognized.

In this situation, there will be a reversal since:

Recoverable amount of \$2,200,000 > Carrying amount \$1,665,000 (\$1,850,000 – amortization of \$185,000 for 2015).

The reversal will be LIMITED so that the asset's carrying amount is not more than what its carrying amount would have been, net of accumulated amortization, if the original impairment loss had never been recognized (i.e. \$2,150,000 – amortization of \$215,000 for 2015 = \$1,935,000).

The reversal will be limited to \$270,000 (\$1,935,000 - \$1,665,000), to adjust the carrying amount to \$1,935,000 (not \$2,200,000).

The journal entry would be:

Accumulated impairment Losses - Copyright.....	270,000
Recovery of Loss from Impairment	270,000

EXERCISE 12-19 (15-20 minutes)

Net assets of Athenian as reported		\$272,000
Adjustments to fair value		
Increase in land value	\$40,000	
Decrease in equipment value	<u>(12,000)</u>	<u>28,000</u>
Fair value of identifiable net assets		300,000
Fair value of consideration transferred		<u>382,000</u>
Amount of goodwill to be recorded		<u>\$82,000</u>

The journal entry to record this transaction is as follows:

Cash	118,000	
Land	110,000	
Buildings	244,000	
Equipment	173,000	
Intangible Assets - Copyrights	98,000	
Goodwill	82,000	
Accounts Payable		92,000
Notes Payable		351,000
Cash		382,000

In reality, only cash equal to the difference would change hands:
 $\$382,000 - \$118,000 = \$264,000$

EXERCISE 12-20 (15-20 minutes)

(a)	Cash	75,000	
	Accounts Receivable	114,000	
	Inventory.....	125,000	
	Land	60,000	
	Buildings	75,000	
	Equipment	90,000	
	Goodwill.....	238,000	
	Allowance for Doubtful		
	Accounts		12,000
	Accounts Payable		300,000
	Notes Payable		50,000
	Cash.....		415,000

It is likely that only cash of \$415,000 – \$75,000 = \$340,000 would actually change hands.

Note that the building and equipment would be recorded at the 7/1/14 cost to Zoe; accumulated amortization accounts would not be recognized.

(b)	Loss on Impairment.....	50,000	
	Accumulated Impairment Losses		
	(Goodwill).....		50,000

Carrying amount (incl. goodwill)	\$500,000
Fair value of unit	<u>450,000</u>
	\$50,000

- (c) Note that a purchase price of \$204,000 is less than the fair value of the net assets of Soorya, resulting in negative goodwill of \$23,000. Current standards require the excess to be recognized as a gain in net income. However, this cannot be done without a thorough reassessment of all the variables, values, and measurement procedures used that resulted in this gain.

EXERCISE 12-20 (Continued)

If the review reveals no overstatement of assets, record as follows:

Cash	75,000	
Accounts Receivable	114,000	
Inventory	125,000	
Land	60,000	
Buildings	75,000	
Equipment	90,000	
Allowance for Doubtful		
Accounts		12,000
Accounts Payable		300,000
Cash		204,000
Gain		23,000

Alternatively – if the review reveals an overstatement of inventory of \$23,000, record as follows:

Cash	75,000	
Accounts Receivable	114,000	
Inventory (\$125,000 – \$23,000)	102,000	
Land	60,000	
Buildings	75,000	
Equipment	90,000	
Allowance for Doubtful		
Accounts		12,000
Accounts Payable		300,000
Cash		204,000

EXERCISE 12-20 (Continued)

(d) Impairment test under IFRS

Loss on Impairment.....	25,000	
Accumulated Impairment Losses (Goodwill).....		25,000
Carrying amount (incl. goodwill)	500,000	
Recoverable amount	<u>475,000*</u>	
	25,000	

* Recoverable amount:

Higher of VIU of 475,000 and FV-SC of 425,000 (450,000-25,000)

- (e) Payment of total consideration of \$465,000 for Soorya resulted in payment for goodwill of \$238,000. Goodwill is “an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified or separately recognized”. In paying for goodwill of \$238,000, Zoe may have considered the value of Soorya’s established reputation, good credit rating, top management team, and/or well-trained employees that make the value of the business as a whole greater than the fair value of its identifiable net assets.

EXERCISE 12-21 (15-20 minutes)

- (a) **December 31, 2014**
- | | | |
|-------------------------|------------|------------|
| Loss on Impairment..... | 44 million | |
| Accumulated Impairment | | |
| Losses (Goodwill)..... | | 44 million |
-
Carrying amount (incl. goodwill)	390 million
Fair value of unit	<u>346 million</u>
	44 million
- (b) Reversal of impairment losses is not permitted under ASPE.
- (c) Impairment under IFRS
- | | | |
|-------------------------------|-----------|-----------|
| Loss on Impairment..... | 5 million | |
| Accumulated Impairment Losses | | |
| (Goodwill)..... | | 5 million |
-
Carrying amount (incl. goodwill)	390 million
Recoverable amount	<u>385 million*</u>
	5 million
- * Recoverable amount:
Higher of VIU of 385 and FV-Selling Costs of 341 (346-5)
- (d) Reversal of goodwill impairment losses is not permitted under IFRS.

***EXERCISE 12-22 (10-15 minutes)**

Pretax accounting income		\$725,000
Add: Loss from discontinued operations		<u>44,000</u>
		769,000
Deduct: Additional depreciation based on fair value and extended life	\$ 57,500*	
Unusual, non-recurring gains	<u>152,000</u>	<u>209,500</u>
Normalized earnings		<u><u>\$559,500</u></u>
*Adjusted depreciation for year on building \$115,000 X 3 X 1/2 (remaining life doubled)		\$172,500
Less: Depreciation per year based on book value and original life		<u>115,000</u>
Increase in annual depreciation		<u><u>\$ 57,500</u></u>

The amortization of identifiable intangibles and the profit-sharing payments to the employees are not part of the income adjustment because they are recurring expenses.

***EXERCISE 12-23 (20-25 minutes)**

(a) Fair value of Belgian's	
 identifiable net assets	\$460,000
Normal rate of return	X .07
Normal earnings	<u>\$ 32,200</u>

Belgian's average earnings for the last 5 years:

2010	\$ 75,000
2011	53,000
2012	84,000
2013	87,000
2014	<u>69,000</u>
	<u>\$368,000</u>

$$\text{Average earnings: } \frac{\$368,000}{5} = \$73,600$$

Average earnings	\$73,600
Normal earnings	<u>(32,200)</u>
Excess earnings	<u>\$41,400</u>

Goodwill—Capitalization at 23%:

$$\frac{\text{Excess Earnings}}{\text{Capitalization Rate}} = \frac{\$41,400}{.23} = \$180,000$$

\$180,000 should be paid for goodwill. Therefore Mooney would pay \$460,000 + \$180,000 = \$640,000 for the company.

(b) Goodwill—Capitalization at 18%:

$$\frac{\text{Excess Earnings}}{\text{Capitalization Rate}} = \frac{\$41,400}{.18} = \$230,000$$

The payment for the company as a whole would be \$460,000 + \$230,000 = \$690,000.

***EXERCISE 12-23 (Continued)**

(c) **Goodwill = 5 X \$41,400 = \$207,000**
Price paid for the company = \$460,000 + \$207,000 = \$667,000

(d) Excess earnings	\$41,400
Present value of annuity of 1 factor,	
5 years @ 15%	<u>3.35216</u>
Estimated goodwill	<u>\$138,779</u>

Amount paid for the company = \$460,000 + \$138,779 = \$598,779

***EXERCISE 12-24 (10-15 minutes)**

(a) **Richmond's valuation of goodwill =**
$$\frac{\$175,000}{.15} = \$1,166,667$$

Aswan's valuation of goodwill =
$$4.56376 * \$175,000 = \underline{\underline{(798,658)}}$$

Difference
$$\underline{\underline{\$368,009}}$$

***Present value of annuity of 1 factor, 7 years @ 12%.**

- (b) Both the seller and the buyer are attempting to determine the present value of the goodwill, which consists of future receipts: the annual excess earnings. Because these future receipts are not contractual in nature, a considerable degree of uncertainty surrounds their measurement. While both parties agree on the amount of excess earnings, they disagree as to the certainty of the continuance of such excess earnings. As a result, differing risk factors and longevity factors are imputed with regard to the same base of \$175,000 in their valuations of goodwill. The seller assumes a discount factor of 15% in perpetuity while the buyer assumes a risk factor of 12% for seven years.

***EXERCISE 12-25 (10-15 minutes)**

Net assets (based on fair value)	
of Moose Jaw CD Corp.	\$ 675,000*
Normal rate of return	<u>.15</u>
Normal earnings	101,250
Expected average earnings	<u>125,000</u>
Excess earnings	23,750
Present value of annuity of 1 factor, 5 years @ 15%	<u>3.35216</u>
Estimated goodwill	<u><u>\$79,614</u></u>

*Book value as given	\$525,000
Inventory increase	<u>150,000</u>
Net assets (fair value)	<u><u>\$675,000</u></u>

Fair value of identifiable net assets	\$675,000
Estimated goodwill	<u>79,614</u>
Estimated fair value of consideration to transfer	<u><u>\$754,614</u></u>

***EXERCISE 12-26 (10-15 minutes)**

Average earnings over the past 3 years:

Total income for the 3 years	\$375,000
Add: Loss on discontinued operations	25,000
Deduct: Unusual and non-recurring gain	<u>(95,000)</u>
Adjusted total income	<u>\$305,000</u>

$$\text{Average earnings: } \frac{\$305,000}{3} = \$101,667$$

Average earnings	\$ 101,667
Rate of return on investment	<u>.25</u>
Total investment	<u>\$406,668</u>

Total investment	\$406,668
Less: Goodwill	<u>-75,000</u>
Fair value of the identifiable net assets	<u>\$331,668</u>

TIME AND PURPOSE OF PROBLEMS

Problem 12-1 (Time 25-35 minutes)

Purpose—to provide the student with an opportunity to determine whether a number of different items should be capitalized or expensed. Items involved are advertising, research and development costs, goodwill, legal costs, pre-operating costs and promotional costs. In addition, the amount included in the company's income statement must be determined.

Problem 12-2 (Time 20-30 minutes)

Purpose—the student determines the cost and amortization of a franchise, patent, and trademark and shows how they are disclosed on the balance sheet. The student prepares a schedule of expenses resulting from the intangibles transactions. Also covers IFRS.

Problem 12-3 (Time 50-70 minutes)

Purpose—to provide the student with a comprehensive problem in accounting for intangible assets. The student is required to adjust the accounts included in a given trial balance to reflect proper classification and amortization at the end of the second year of a firm's operations. The problem is complicated by the fact that proper adjusting entries were not prepared at the end of the first year, necessitating the correction of prior year's errors. The student is required to prepare an eight-column work sheet to include a trial balance, adjustments, a balance sheet, and an income statement. This is an excellent problem to review the accounting procedures for all types of intangibles in a realistic manner. Also covers IFRS.

Problem 12-4 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to appropriately reclassify amounts charged to a single intangible asset account. Capitalized in the account are amounts representing franchise costs, prepaid rent, licence, pre-operating costs, organization costs, prior net loss, patents, goodwill, royalty expenses, and R & D costs. The student must also be alert to the fact that several transactions require that an adjustment of Retained Earnings be made. The problem provides a good summary of accounting for intangibles.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 12-5 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to determine income statement and balance sheet presentation for costs related to research and development of patents. The problem calls on the student to determine whether costs incurred are properly capitalized or expensed. The problem addresses the basic issues involved in accounting for R & D costs and patents.

Problem 12-6 (Time 30-40 minutes)

Purpose—to provide the student with an opportunity to apply the revaluation model using the asset adjustment method as well as the proportionate method, and to compare both methods.

Problem 12-7 (Time 30-40 minutes)

Purpose—to provide the student with an opportunity to prepare the intangible assets section of the balance sheet including an indefinite-life trade name, a limited-life copyright and goodwill. Impairment of the intangible assets must also be assessed and recorded. A good review of impairment of the three types of intangible assets.

Problem 12-8 (Time 15-20 minutes)

Purpose—Builds on P12-7 and covers IFRS.

Problem 12-9 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to determine the useful life of various intangible assets. Examples must be provided for testing for impairment of the various intangibles. The problem deals with applying the criteria for determining useful life and whether assets have an indefinite useful life by applying the theory.

Problem 12-10 (Time 20-25 minutes)

Purpose—to provide an opportunity for the student to determine the amount of goodwill included in the purchase price of a business. The student must then test goodwill for impairment assuming two different fair values for the division. The journal entry for impairment and income statement presentation must also be provided. Also covers IFRS.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 12-11 (Time 15-20 minutes)

Purpose—to provide the student with goodwill impairment calculations under IFRS.

***Problem 12-12 (Time 20-25 minutes)**

Purpose—to provide an opportunity for the student to determine the amount of goodwill included in the purchase price of a business under four methods. The methods include capitalization of excess earnings in perpetuity and for a four-year period, and a purchase of excess earnings for the next four years. The student is also required to prepare a journal entry reflecting the purchase of the business. The problem provides practice in the calculation of goodwill.

***Problem 12-13 (Time 25-30 minutes)**

Purpose—to present the student with an opportunity to determine an amount for goodwill based on three different methods. The student is then required to write a letter indicating the possible values and what price might be offered for this potential acquisition.

SOLUTIONS TO PROBLEMS

PROBLEM 12-1

- 1. Such costs are prohibited from being capitalized as an intangible asset. The dealer relations program cost of \$3,000,000 should be expensed in the current period because it would be difficult to match and measure the future benefits. Advertising (marketing) costs must be expensed as incurred or when the advertising takes place for the first time. In either case, advertising expense would be charged in the current period.**
- 2. Pilot plant cost of \$5,500,000 is a research and development cost which should be expensed as incurred. The pilot plant will not be reused after the experimental work is completed. If any property, plant or equipment was purchased, it would be capitalized and depreciated over its useful life.**
- 3. The reception cost of \$12,700 and training costs of \$64,400 would be expensed in the current period.**

The wheelchair ramp of \$100,000 would be considered an addition to the building and would be capitalized as part of the building cost. It would be depreciated over the useful life of the building (or a shorter period if the ramp is expected to last fewer years).

The uniform cost of \$41,600 would be expensed in the current period since it would have a period of expected benefit of approximately one year.

PROBLEM 12-1 (Continued)

- 4. To record the purchase of Eagle Company, \$5,200,000 should be capitalized to identifiable net assets and \$800,000 should be capitalized to goodwill. This transaction represents the acquisition of a company which should provide future benefits. The goodwill would not be amortized. The goodwill would be assigned to a cash-generating unit in order to be tested for impairment. The cash-generating unit would be reviewed for impairment on an annual basis and any decline in carrying amount of the cash-generating unit below recoverable amount would be written off as an impairment loss.**
- 5. All advertising costs would be expensed.**
- 6. The legal fees for the patent application of \$400,000 should be capitalized as an intangible asset. Amortization of the patent would be over the patent's 10-year economic life, or \$40,000 annually. The amount of amortization expense for the patent for the six-month period November 1, 2013, to April 30, 2014, would be \$20,000 ($\$40,000 \times 6/12$). The net amount of the patent would be \$380,000 ($\$400,000 - \$20,000$) on the April 30, 2014 statement of financial position.**

PROBLEM 12-2

**(a) Canberra Corporation
Intangible Assets
December 31, 2014**

Franchise, net of accumulated amortization (Schedule 1)	\$61,309
Patent, net of accumulated amortization of (Schedule 2)	11,333
Trademark, net of accumulated amortization of (Schedule 3)	<u>29,747</u>
Total intangible assets	<u><u>\$102,389</u></u>

<u>Schedule 1</u>	<u>Franchise</u>	
Cost of franchise on 1/1/14 (\$35,000 + \$33,121)	\$68,121	
2014 amortization (\$68,121 X 1/10)	<u>(6,812)</u>	
Cost of franchise, net of amortization	<u><u>\$61,309</u></u>	

<u>Schedule 2</u>	<u>Patent</u>	
Cost of securing patent on 1/2/14	\$13,600	
2014 amortization (\$13,600 X 1/6)	<u>(2,267)</u>	
Cost of patent, net of amortization	<u><u>\$11,333</u></u>	

<u>Schedule 3</u>	<u>Trademark</u>	
Cost of trademark on 7/1/11	\$28,600	
Amortization, 7/1/11 to 7/1/14 (\$28,600 X 3/15)	<u>(5,720)</u>	
Book value on 7/1/14	22,880	
Cost of successful legal defence on 7/1/14	<u>8,160</u>	
Book value after legal defence	31,040	
Amortization, 7/1/14 to 12/31/14 (\$31,040 X 1/12 X 6/12)	<u>(1,293)</u>	
Cost of trademark, net of amortization	<u><u>\$29,747</u></u>	

PROBLEM 12-2 (Continued)

(b) Canberra Corporation
Expenses Resulting from Selected Intangible Assets
Transactions
For the Year Ended December 31, 2014

Interest expense ($\$33,121 \times 8\%$)	\$ 2,650
Franchise amortization (Schedule 1)	6,812
Franchise fee ($\$800,000 \times 5\%$)	40,000
Patent amortization (Schedule 2)	2,267
Trademark amortization (Schedule 4)	<u>2,246</u>
Total intangible assets	<u>\$53,975</u>

Note: The \$45,000 of research and development expense incurred in developing the patent would have been expensed prior to 2014.

<u>Schedule 4</u>	<u>Trademark Amortization</u>	
Amortization, 1/1/14 to 6/30/14 ($\$28,600 \times 1/15 \times 6/12$)	\$ 953	
Amortization, 7/1/14 to 12/31/14 (Schedule 3)	<u>1,293</u>	
Total trademark amortization	<u>\$2,246</u>	

(c) Under IFRS, the response would be similar. The company can choose to use the revaluation method for its subsequent accounting if an active market exists for the intangible assets.

PROBLEM 12-3

(a)

**Gelato Corporation
Year Ended December 31, 2014
Adjusting Journal Entries
(Not required)**

-1-

Machinery	40,700	
Intangible Assets - Patents		40,700
(To transfer cost of improving machinery to a PP&E account)		

-2-

Amortization Expense	5,147	
Accumulated Amortization - Patents		5,147
[To record 2014 patent amortization: 1/17 X (\$87,500) = \$5,147]		

-3-

Loss on Impairment	27,353	
Accumulated Impairment Losses - Patents		27,353
1. Compare carrying amount with undiscounted future net cash flow: (\$87,500 – \$5,147 = \$82,353) and \$80,000). Patent is impaired		
2. Impairment loss = carrying amount – fair value: \$82,353 – \$55,000 = \$27,353		

PROBLEM 12-3 (Continued)

	-4-		
Retained Earnings (\$60,000 / 15)		4,000	
Accumulated Amortization - Licenses			4,000
(re: Licensing Agreement No. 1)			

	-5-		
Retained Earnings		33,600	
Accumulated Impairment Losses -			33,600
Licenses			

(To write off the permanent 60 percent reduction in the expected revenue-producing value of licensing agreement No. 1 caused by the late December 2013 explosion $[(\$60,000 - \$4,000) \times 60\% = \$33,600]$.

	-6-		
Amortization Expense		1,600	
Accumulated Amortization - Licenses			1,600
$(\$60,000 - \$4,000 - \$33,600)/14 = \$1,600$			
rounded re: Licensing Agreement No. 1			

	-7-		
Intangible Assets – Licenses		4,000	
Unearned Revenue			4,000
(To classify revenue received in advance on licensing agreement as unearned revenue re: Agreement No.2)			

	-8-		
Amortization Expense		12,000	
Accumulated Amortization - Licenses			12,000
To record 2014 amortization of licensing agreement No. 2			
$(1/5 \times \$60,000)$			

PROBLEM 12-3 (Continued)

-9-

Retained Earnings	30,000	
Goodwill		30,000
(To expense incorporation costs improperly charged to Goodwill)		

-10-

Equipment	15,000	
Accounts Receivable	6,100	
Leasehold Improvements		21,100
(To charge the equipment account with movable equipment and to record a receivable from the landlord for the real estate taxes paid by Gelato)		

-11-

Depreciation Expense	1,500	
Retained Earnings	1,500	
Accumulated Depreciation - Leasehold Improvements		3,000
(To record 2013 and 2014 amortization of leasehold improvements based on 10 year life of lease (2 X 10% X \$15,000))		

-12-

Research and Development Expense	90,000	
Selling Expenses		90,000
(Salaries of \$110,000 x 50%) + materials consumed of \$35,000		

PROBLEM 12-3 (Continued)

General Ledger Account	<u>Trial Balance</u>		<u>Adjustments</u>		<u>Income Statement</u>		<u>Stmt Fin Position</u>	
	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>
Cash	\$57,000						\$57,000	
Accounts Receivable	87,000		\$6,100	(10)			93,100	
Allowance for Doubtful Accounts		\$1,500						\$1,500
Inventory	60,200						60,200	
Machinery	82,000		40,700	(1)			122,700	
Equipment	37,000		15,000	(10)			52,000	
Accumulated Amortization		26,200						26,200
-Patents	128,200			(1)	\$40,700		87,500	
Leasehold Improvements	36,100			(10)	21,100		15,000	
Prepaid Expenses	13,000						13,000	
Goodwill	30,000			(9)	30,000		0	
Intangible Assets - Licenses								
	116,000		4,000	(7)			120,000	
Accounts Payable		93,000						93,000
Unearned Revenue		17,280		(7)	4,000			21,280
Common Shares		300,000						300,000
Retained earnings, January 1, 2014		173,020	4,000	(4)				
			33,600	(5)				
			30,000	(9)				
			1,500	(11)				103,920

PROBLEM 12-3 (Continued)

General Ledger Account	Trial Balance		Adjustments		Income Statement		Stmt Fin Position	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Sales		720,000				720,000		
Cost of Goods Sold	475,000				475,000			
Selling Expenses	180,000		(12)	90,000	90,000			
Interest Expense	29,500				29,500			
Totals	<u>\$1,331,000</u>	<u>\$1,331,000</u>						
Research and Development Expense			90,000	(12)	90,000			
Acc. Amort. – Patents			(2)	5,147				5,147
Acc. Imp. Losses– Patents			(3)	27,353				27,353
Acc. Dep. - Leasehold Improvements			(11)	3,000				3,000
Acc. Amort. Licenses			(4)	4,000				
			(6)	1,600				
			(8)	12,000				17,600
Loss on Impairment			27,353	(3)	27,353			
Acc. Imp. Losses. – Licences			(5)	33,600				33,600
Depreciation Expense			1,500	(11)	1,500			
Amortization Expense			5,147	(2)				
			1,600	(6)				
			12,000	(8)	18,747			
			<u>\$271,385</u>	<u>\$271,385</u>	732,100	720,000	620,500	632,600
Net loss for 2014						12,100	12,100	
Totals					<u>\$732,100</u>	<u>\$732,100</u>	<u>\$632,600</u>	<u>\$632,600</u>

PROBLEM 12-3 (Continued)

(b)

Gelato Corporation
Statement of Financial Position
December 31, 2014

<u>Assets</u>			
Current assets			
Cash		\$57,000	
Accounts receivable	\$93,100		
Less allowance for doubtful accounts	<u>(1,500)</u>	91,600	
Inventory		60,200	
Prepaid expenses		<u>13,000</u>	
Total current assets			\$221,800
Property, plant, and equipment			
Machinery	122,700		
Equipment	<u>52,000</u>	174,700	
Less accumulated depreciation		<u>(26,200)</u>	
		148,500	
Leasehold improvements	15,000		
Less accumulated depreciation	<u>(3,000)</u>	<u>12,000</u>	
Total property, plant, and equipment			160,500
Intangible assets			
Patents	87,500		
Less accumulated amortization and impairment losses*	<u>(32,500)</u>	55,000	
Licensing agreements	120,000		
Less accumulated amortization and impairment losses**	<u>(51,200)</u>	<u>68,800</u>	
Total intangible assets			<u>123,800</u>
Total assets			<u><u>\$506,100</u></u>

*\$5,147 + \$27,353

**\$17,600 + \$33,60

PROBLEM 12-3 (Continued)

Liabilities and Shareholders' Equity

Current liabilities		
Accounts payable	\$ 93,000	
Unearned revenues	<u>21,280</u>	
Total current liabilities		\$ 114,280
Shareholders' equity		
Share capital		
Common shares	\$ 300,000	
Retained earnings	<u>91,820</u>	
Total shareholders' equity		<u>391,820</u>
Total liabilities and shareholders' equity		<u>\$506,100</u>

Gelato Corporation Income Statement For the Year Ended December 31, 2014

Sales		\$720,000
Cost of goods sold		<u>475,000</u>
Gross profit		245,000
Operating expenses		
Selling expenses	\$90,000	
Research and development expenses	90,000	
Amortization expense	18,747	
Depreciation expense	<u>1,500</u>	<u>200,247</u>
Income from operations		44,753
Other expenses and losses		
Interest expense	29,500	
Loss on impairment	<u>27,353</u>	<u>56,853</u>
Loss before income tax		(12,100)
Income tax expense or recovery		<u>xxxx</u>
Net loss		<u>\$(12,100)</u>
		<u>-xxx</u>

*Note to instructor: the income tax expense would usually be shown here.

PROBLEM 12-3 (Continued)

(c) Reporting under IFRS

The impairment test for the patent would be different under IFRS:

Recoverable amount = higher of VIU and FV less selling costs

= higher of (\$75,000) or (\$55,000 – \$5,000)

= \$75,000

Carrying value = \$87,500 – \$5,147 = \$82,353

Impairment loss = \$75,000 – \$82,353 = \$7,353

PROBLEM 12-4

(a)

Intangible Assets – Franchises	35,000	
Prepaid Rent	25,000	
Retained Earnings	17,000	
Intangible Assets - Patents (\$65,400 + \$13,350)	78,750	
Intangible Assets – Licenses	86,000	
Research and Development Expense	75,000	
Goodwill (287,500 – 175,000)	112,500	
Intangible Assets - Development Costs	175,000	
Royalties Expense	2,775	
Intangible Assets		607,025
Amortization Expense (\$35,000 , 8)	4,375	
Retained Earnings (\$35,000 , 8 X 6/12)	2,188	
Accumulated Amortization - Franchises		6,563
Rent Expense (\$25,000 , 2)	12,500	
Retained Earnings (\$25,000 , 2 X 3/12)	3,125	
Prepaid Rent		15,625
Amortization Expense	6,525	
Accumulated Amortization – Patents		6,525
(\$65,400 X 10.5/120 months) + (\$13,350 X 7/116.5 months)		
Amortization Expense	14,333	
Accumulated Amortization - Licenses		14,333
(\$86,000 , 5 X 10/12)		

PROBLEM 12-4 (Continued)

Amortization Expense	13,125
Accumulated Amortization –	
Development Costs (\$175,000 , 10 X	13,125
9/12)	

- (b) Goodwill is only recognized in the financial statements if the goodwill was purchased in a business combination. Therefore, its reported value, if any, would be the result of a verifiable transaction with an arm's length party, and any subsequent impairment testing conducted according to generally accepted accounting principles. An investor will understand that goodwill is a result of acquiring another business with unidentifiable value in excess of the target business's fair value of identifiable net assets, and that the entity is expected to benefit from this unidentifiable value. This is useful information for an investor. Recognizing goodwill separately from intangible assets allows investors to see the carrying amount of recorded goodwill (which is not an identifiable asset, and is not amortized), separate from the carrying amount of intangible assets (which are identifiable assets that are amortized if they have limited lives).

PROBLEM 12-5

- (a) **Income statement items and amounts for the year ended December 31, 2014:**

Research and Development Expense*	\$185,167
Amortization of patent (\$102,500 , 10 years)	10,250

***The research and development expense could be listed by the components rather than in one total. The details of the research and development expense is as follows:**

Depreciation—building	
(\$185,000 , 15 years) X 50%	\$ 6,167
Salaries and employee benefits	
(\$87,000 + \$52,500)	139,500
Other expenses (\$21,000 + \$18,500)	<u>39,500</u>
Total research and development expense	<u>\$185,167</u>

Development costs capitalized in 2014

Salaries and benefits	\$125,000
Other expenses	81,000
Depreciation of building	<u>6,167</u>
Total	<u>\$212,167</u>

PROBLEM 12-5 (Continued)

Statement of Financial Position items and amounts as of December 31, 2014:

Land	\$ 61,000
Building (net of accumulated depreciation of \$12,333)	172,667
Intangible Assets - Patents (net of accumulated depreciation of \$17,938)*	84,562
Intangible Assets - Development costs	<u>212,167</u>
	<u>530,396</u>

***([(\$102,500 , 10] X 3/4) + (\$102,500 , 10)**

Research and development costs should be charged to expense when incurred, except for those expenditures that meet the six development phase criteria for capitalization including managerial intent to complete, and financial and technical viability.

The patent was acquired for manufacturing rights rather than for use in research and development activities. Consequently, the cost of the patent can be capitalized as an intangible asset and amortized over its useful life.

- (b) For costs to qualify as development costs to be capitalized, the company has to be able to demonstrate that the following conditions have been met.
1. Technical feasibility of completing the project
 2. Entity's intention to complete it to use or sell
 3. Entity's ability to use or sell it
 4. Availability of technical, financial and other resources needed to complete it and to use or sell it
 5. The way in which the future economic benefits will be received; including the existence of a market for the asset if it will be sold, or for its usefulness to the entity if it will be used internally
 6. Ability to reliably measure the associated costs attributable to the asset during development

PROBLEM 12-6

(a) January 2, 2014

Intangible Assets – Licences	411,400	
Cash.....		411,400
22 X \$18,700 = \$411,400		

**(b) Revaluation model
(Asset adjustment method)**

December 31, 2015

Amortization Expense	51,425	
Accumulated Amortization – Intangible Assets - Licences.....		51,425
\$411,400 / 8 yrs = \$51,425		

Accumulated Amortization – Intangible Assets - Licences.....	102,850	
Intangible Assets - Licences		102,850
\$51,425 + \$51,425 = \$102,850		

The Intangible Assets – Licences account is now \$411,400 - \$102,850 = \$308,550, and the related Accumulated Amortization account is zero.

Revaluation Gain or Loss	125,950	
Intangible Assets - Licences		125,950
\$308,550 – (\$8,300 X 22) = \$125,950		

Carrying amount of Intangible Assets - Licences as at December 31, 2015 = \$182,600 (\$8,300 X 22 or \$308,550 - \$125,950).

There would be no impairment loss at December 31, 2015 because the value in use is higher than the fair value of the asset.

PROBLEM 12-6 (Continued)

December 31, 2016

Amortization Expense.....	30,433	
Accumulated Amortization -		
Licences		30,433
\$182,600 / 6 yrs = \$30,433		

December 31, 2017

Amortization Expense	30,433	
Accumulated Amortization -		
Licences		30,433

Accumulated Amortization –

Intangible Assets - Licences.....	60,866	
Intangible Assets - Licences		60,866
\$30,433 + \$30,433 = \$60,866		

The Intangible Assets – Licences account is now \$182,600 - \$60,866 = \$121,734, and the related Accumulated Amortization account is zero.

Intangible Assets – Licences	252,266	
Revaluation Gain or Loss		125,950
Revaluation Surplus (OCI).....		126,316
(\$17,000 X 22) - \$121,734 = \$252,266		

The carrying amount of the licences at December 31, 2017 is \$17,000 X 22 = \$374,000, or \$121,734 + \$252,266 = \$374,000.

PROBLEM 12-6 (Continued)

(c) Revaluation model (Proportionate method), Dec. 31, 2015

Amortization expense	51,425
Accumulated Amortization - Licences.....	51,425
\$411,400 / 8 yrs = \$51,425	

	Before revaluation		Proportional after revaluation
Int. Assets - Licences	\$411,400	X 182,600 / 308,550	\$243,467
Accumulated amortization	<u>102,850*</u>	X 182,600 / 308,550	<u>60,867</u>
Carrying amount	<u>\$308,550</u>		<u>\$182,600</u>
*\$51,425 X 2			

Accumulated Amortization – Licences.....	41,983
Revaluation Gain or Loss	125,950
Intangible Assets - Licences	167,933

December 31, 2016	
Amortization expense	30,433
Accumulated Amortization – Licences	30,433
\$182,600 / 6 yrs = \$30,433	

December 31, 2017	
Amortization expense	30,433
Accumulated Amortization – Licences	30,433

PROBLEM 12-6 (Continued)

	<u>Before revaluation</u>		<u>Proportional after revaluation</u>
Int. Assets - Licences	\$243,467	X 374,000 / 121,734	\$747,997
Accumulated amortization	<u>121,733*</u>	X 374,000 / 121,734	<u>373,997</u>
Carrying amount	<u>\$121,734</u>		<u>\$374,000</u>
*\$60,867 + \$30,433 X 2 = \$121,733			

Intangible Assets - Licences.....	504,530	
Revaluation Gain or Loss**		125,950
Revaluation Surplus (OCI).....		126,316
Accumulated Amortization - Licences		252,264
\$17,000 X 22 - \$121,734 = \$252,266		

****The increase in carrying amount is recorded as a credit to Revaluation Surplus (OCI), unless the increase reverses a revaluation decrease previously recognized in income. If so, the increase is recognized in income to the extent of the prior decrease. In this example, \$125,950 revaluation loss was recorded in income on December 31, 2015. Since there is an increase in carrying amount in excess of this amount on December 31, 2017, a \$125,950 revaluation gain is recorded in income on December 31, 2017.**

The carrying amount of the licences at December 31, 2017 is \$17,000 X 22 = \$374,000, or \$747, 997 - \$373,997.

PROBLEM 12-6 (Continued)

- (d)** The effects on the statement of comprehensive income are the same under both the asset adjustment method and the proportionate method. However the effects on the statement of financial position are different under each method. Under the asset adjustment method, the Intangible Assets – Licences account balance is the fair value of the licences at each revaluation date, and the related Accumulated Amortization – Intangibles - Licences account balance is zero. Under the proportionate method, the Intangible Assets – Licences account balance and the related Accumulated Amortization – Intangible Assets – Licences account balance are proportionately adjusted to reflect the new carrying amount, which is equal to the fair value of the licences at each revaluation date. An investor would likely prefer that Aquaculture use the proportionate method to apply the revaluation method, because the proportionate method presents an adjusted balance in the accumulated amortization account (versus presenting a zero balance in the accumulated amortization account, as under the asset adjustment method). This provides information about the relative age of the licences.

PROBLEM 12-7

(a) Meridan Golf and Sports
INTANGIBLES SECTION OF BALANCE SHEET
December 31, 2014

Trade name	\$ 15,000
Copyright (net of accumulated amortization of \$313) (Schedule 1)	24,687
Goodwill (Schedule 2)	<u>50,000</u>
Total intangibles	<u><u>\$89,687</u></u>

Schedule 1 Calculation of Copyright

Cost of copyright at date of purchase	\$25,000
Amortization of Copyright for 2014 $[(\$25,000 \div 40) \times \frac{1}{2} \text{ year}]$	<u>(313)</u>
Book value of copyright at December 31	<u><u>\$24,687</u></u>

Schedule 2 Goodwill Measurement

Fair value of consideration transferred	\$650,000
Fair value of identifiable assets	700,000
Fair value of identifiable liabilities	<u>(100,000)</u>
Fair value of net identifiable assets	<u>600,000</u>
Value assigned to goodwill	<u><u>\$50,000</u></u>

Amortization expense for 2014 is \$313 (see Schedule 1). There is no amortization for the goodwill or the trade name, which are considered to have indefinite lives.

(b)

Amortization Expense	625	
Accumulated Amortization - Copyright $(\$25,000 \div 40)$		625

PROBLEM 12-7 (Continued)

There is a full year of amortization on the Copyright. There is no amortization for the goodwill or the trade name, which are considered indefinite life intangibles.

Meridan Golf and Sports INTANGIBLES SECTION OF BALANCE SHEET December 31, 2015

Trade name	\$ 15,000
Copyright (net of accumulated amortization of \$938) (Schedule 1)	24,062
Goodwill	<u>50,000</u>
Total intangibles	<u><u>\$89,062</u></u>
 <u>Schedule 1</u> Calculation of Copyright	
Cost of Copyright at date of purchase	\$25,000
Amortization of Copyright for 2014, 2015 [(\$25,000 ÷ 40) X 1.5 years]	<u>(938)</u>
Book value of copyright at December 31	<u><u>\$24,062</u></u>
 (c)	
Loss on Impairment (Goodwill).....	13,000
Loss on Impairment- Trade Names	7,000
Acc Impairment Losses (Goodwill)	13,000
Acc Impairment Losses- Trade Names	7,000

Calculations follow in Schedule 2

PROBLEM 12-7 (Continued)

Schedule 2

Indefinite-life intangibles and goodwill:

	Carrying value	Fair value	Impairment
Trade Name	15,000	8,000	7,000
Reporting Unit:	450,000		
Goodwill	(7,000)		
	\$443,000	430,000	13,000

Limited-life intangibles:

	Carrying value	Undiscounted cash flows
Copyright	23,438 (\$25,000 - [\$25,000 / 40 years * 2.5 years])	30,000
No impairment		

PROBLEM 12-8

	Carrying amount	Recoverable Amount (higher of VIU or FV-SC)	Impairment
Trade Name	15,000	7,500	7,500
Copyright	23,438	27,000	0
Cash generating unit to which Goodwill was allocated	450,000 (7,500) 442,500	440,000	2,500

The impairment test for the identifiable assets would be performed first, and then the carrying amount of the CGU would be compared to its recoverable amount. The result, if the carrying amount > the recoverable amount, would be the impairment loss – first assigned to goodwill with any remainder then allocated among the other assets on a relative book value basis.

Loss on Impairment (Goodwill).....	2,500	
Loss on Impairment - Trade Names	7,500	
Acc Impairment Losses (Goodwill)		2,500
Acc Impairment Losses- Trade Names ...		7,500

PROBLEM 12-9

1. (i) The trade name has a remaining legal life of 16 years and can be renewed at a reasonable cost. There appears to be reasonable assurance that the economic benefits of the trade name will continue indefinitely because positive cash flows can be identified for 25 years and are expected to continue. Accordingly, the asset would not be amortized. It would be tested for impairment at least on an annual basis (or more often if circumstances dictate).

- (ii) The useful life to the enterprise is three years, so the trade name should be checked for the need for amortization over the three year period. Any amortization would be based on the cost of the trade name less any residual value. The residual value, usually assumed to be zero for intangibles, is expected in this case to be substantial – the trade name will continue to have value and a useful life to another enterprise. Phelps expects to have no problem in selling the subsidiary at the end of the three years. If Phelps determines that the residual value after 3 years is equal to or greater than its cost to Phelps, no amortization would be necessary.

The trade name would be tested for impairment if conditions indicate that the estimated future net cash flow may be less than its carrying amount. These conditions would include, for example: a loss from operation of the asset; negative cash flows from the asset; changes in external economic conditions; a substantial decline in the market for the product; and a decline in net realizable value of the asset below the net carrying amount.

PROBLEM 12-9 (Continued)

- 2. The licence has a legal life of 5 years and can be renewed indefinitely at a reasonable cost. There appears to be reasonable assurance that the economic benefits of the licence will continue indefinitely because it is expected to generate positive cash flows indefinitely. Accordingly, the asset would not be amortized. It would be tested for impairment at least on an annual basis (or more often if circumstances dictate).**
- 3. The magazine subscription list should be amortized over its estimated useful life of 25 years. An indefinite useful life was not selected in this case due to the nature of the intangible asset. Although Phelp may intend to add customer names and other information to the list in the future, the expected benefits of the acquired subscription list apply only to the customers on that list at the date of acquisition. The magazine subscription list would be tested for impairment if conditions indicate that the estimated future net cash flows may be less than its carrying amount, caused by, for example, a substantial decline in the market for the product.**
- 4. The non-competition covenant should be amortized over its estimated useful life of 25 years. An indefinite useful life was not selected in this case since the projected cash flows are expected to continue for 25 years but there is no mention of usefulness beyond this point. The non-competition covenant would be tested for impairment if conditions indicate that the estimated future net cash flows may be less than its carrying amount, caused by, for example, a substantial decline in the market for the product, making the non-competition covenant irrelevant.**

PROBLEM 12-9 (Continued)

- 5. The medical files should be amortized over its estimated useful life. An indefinite useful life was not selected in this case due to the nature of the intangible asset. The issue is similar to the magazine subscription list in that although Phelp may intend to add clients to the list in the future, the expected benefits of the acquired medical files apply only to the clients on that list at the date of acquisition. An estimate of useful life could be determined based on the average life expectancy and retention of the clients. The medical files would be tested for impairment if conditions indicate that the estimated future net cash flow may be less than its carrying amount, caused by, for example, a loss of clients from the purchased practice.**
- 6. The favourable lease should be amortized over 35 years. The useful life could be reduced by factors such as lease contract provisions owing to Phelp being a sub-lessor; Phelp's intended period of lease of the warehouse; and, the effect of economic factors on rentals in the area. The favourable lease would be tested for impairment if conditions indicate that the estimated future net cash flow may be less than its carrying amount, caused by, for example, decreases in area rental rates.**

PROBLEM 12-10

(a)	Fair value of consideration transferred	\$2,000,000
	Less fair value of identifiable net assets	<u>1,700,000</u>
	Goodwill	<u>\$300,000</u>

(b) The fair value of Lubello Division of \$1,850,000 exceeds the carrying amount of the Division including goodwill of \$1,628,500. As a result, no impairment loss is recognized.

(c) The carrying amount of the Division including goodwill of \$1,628,500 exceeds its fair value of \$1,500,000, therefore goodwill is considered impaired by \$128,500.

(d)	Loss on Impairment (Goodwill)	128,500	
	Acc. Impairment Losses (Goodwill)		128,500

The loss would be reported separately in the income statement before taxes and discontinued operations.

(e) Under IFRS, goodwill is allocated to a cash-generating unit (CGU), and the CGU is tested for impairment annually and whenever circumstances indicate the CGU may be impaired. Impairment loss, if any, is calculated as the excess of the CGU's carrying amount over its recoverable amount (higher of VIU and FV-SC). Any impairment loss is first allocated to goodwill and then to other assets in the CGU on a proportional basis. Reversal of goodwill impairment loss is not permitted.

PROBLEM 12-11

a) Goodwill calculation

Fair value of consideration transferred		\$763,000
Fair value of assets	\$1,080,000	
Fair value of liabilities	<u>430,000</u>	
Fair value of net assets		<u>650,000</u>
Value assigned to goodwill		<u><u>\$113,000</u></u>

- b) The recoverable amount of the CGU is compared with the carrying amount of the CGU to determine if there is any impairment.**

Based on the information provided, the recoverable amount is the higher of:

- FV – selling costs = \$4,250,000
- VIU = \$3,850,000

Recoverable amount of CGU	4,250,000
Carrying value of CGU	4,613,000
Impairment loss	363,000

The impairment loss of \$363,000 exceeds the amount of goodwill. Therefore, the impairment loss should be allocated to reduce the CGU's carrying amount in the following order: first to goodwill, then the remainder to the other assets in the CGU on a proportionate basis, based on relative carrying amount.

PROBLEM 12-11 (Continued)

After recording the impairment loss, the CGU's carrying amount will be as follows:

	Plant A CGU carrying amount	Impairment loss	Adjusted carrying amount
Assets (Other than goodwill)	\$4,500,000	(250,000)	\$4,250,000
Goodwill	113,000	(113,000)	0
Total carrying amount of CGU	\$4,613,000	(363,000)	\$4,250,000

c) If there is a subsequent reversal of impairment, the goodwill impairment loss cannot be reversed; any future reversal will be limited to the writedown of the other assets (\$250,000).

***PROBLEM 12-12**

(a) Net assets at current value

Current assets (\$125,000 + \$40,000)	\$165,000
FV-NI investments (\$55,000 + \$20,000)	75,000
Buildings (net)	405,000
Current liabilities	(85,000)
Notes payable	<u>(105,000)</u>

Net assets	455,000
	<u>X 15%</u>
Normal earnings	<u>\$68,250</u>

Project net income

Base for 2014: \$110,000	
2015 (\$110,000 X 1.15)	126,500
2016 (\$126,500 X 1.15)	145,475
2017 (\$145,475 X 1.15)	167,296
2018 (\$167,296 X 1.15)	<u>192,390</u>

$$\$631,661 \div 4 = \underline{\underline{\$157,915}}$$

1. Average earnings next four years	\$157,915
Normal earnings	<u>(68,250)</u>
Excess earnings	<u>\$ 89,665</u>

$$\$89,665 \times 4 = \$358,660$$

$$\$358,660 + \$455,000 \text{ (net assets)} = \$813,660$$

$$2. \$89,665 \div 30\% = \$298,883$$

$$\$298,883 + \$455,000 \text{ (net assets)} = \$753,883$$

$$3. \$89,665 \times 2.85498^* = \$255,992$$

$$\$255,992 + \$455,000 \text{ net assets} = \$710,992$$

$$^* \text{PV annuity factor, } n=4, i=15$$

$$4. \$89,665 \div 16\% = \$560,406$$

$$\$560,406 + \$455,000 \text{ (net assets)} = \$1,015,406$$

***PROBLEM 12-12 (Continued)**

- (b) Since the value of the company is estimated to be between \$710,992 and \$1,015,406, Yardon Appraisal should likely advise Macho not to purchase De Fuentes, Inc. for this price since three of the estimates result in a value for the business that is under \$1,000,000; the fourth estimate is just slightly above the asking price of \$1,000,000.
- (c) The entry on Macho's books would be:

Current Assets	165,000	
Fair Value-Net Income Investments	75,000	
Buildings	405,000	
Goodwill	395,000	
Current Liabilities		85,000
Notes Payable		105,000
Cash		850,000

***PROBLEM 12-13**

(a)

**Balloon Bunch Corporation
Calculation of Goodwill and Purchase Price
As of December 31, 2014**

	<u>Goodwill</u>
1. <u>Excess Earnings Approach:</u>	
Earnings for past 5 years	<u>\$350,000</u>
Average Earnings (\$350,000/5)	\$ 70,000
Normal Earnings (\$400,000 X .15)	<u>(60,000)</u>
Excess Annual Earnings	<u>\$ 10,000</u>
Excess Earnings Capitalized (Goodwill) @ 20% (\$10,000/.20)	<u>\$ 50,000</u>

Purchase Price = \$50,000 + \$400,000 = \$450,000

2. <u>Number of Years Method:</u>	
Excess Annual Earnings	\$ 10,000
Number of Years Estimated to Continue	<u>6</u>
Goodwill	<u>\$ 60,000</u>

Purchase Price = \$60,000 + \$400,000 = \$460,000

PROBLEM 12-13 (Continued)

3. Times Average Earnings:

Average Yearly Earnings	\$ 70,000
Number of Times Paid-Similar Companies	<u>5</u>
Total Value of Company	\$350,000
Less: Fair Value of Net Assets	<u>(400,000)</u>
Negative goodwill	<u><u>\$ (50,000)</u></u>

**Purchase price = (\$50,000) + \$400,000 =
\$350,000.**

***PROBLEM 12-13 (Continued)**

(b) Dear Ms. Lima:

I have analyzed the information you provided me on Balloon Bunch Corporation and have compiled information to help you decide how much to offer the sellers. The analysis includes calculations of goodwill.

Goodwill is an intangible asset that represents the excess of the purchase price paid for a company over the fair value of the identifiable assets (net of liabilities) in an arm's-length transaction. Goodwill arises because a company has better-than-average earnings, a good reputation, an excellent management team, effective advertising, and other qualities that make a buyer willing to spend more than the fair value of the identifiable net assets to acquire the company.

There are several ways to calculate goodwill for a company. I have prepared the attached Calculation of Goodwill and Purchase Price to demonstrate three ways to calculate Balloon Bunch's goodwill. The first is the excess earnings approach. Excess earnings are defined as the difference between the average earnings of the corporation and the industry's average earnings for the same net assets. Under this approach, you average the company's past net earnings to find average annual earnings of \$70,000.

Companies in the balloon industry average a 15 percent rate of return on their net assets. If Balloon Bunch averaged 15 percent on its net assets, its normal earnings would be \$60,000. Therefore, Balloon Bunch earns \$10,000 per year more than similar competitors. Based on current economic conditions, fluctuations in annual earnings, and other considerations, excess earnings should be capitalized at a conservative 20 percent rate. This indicates that the goodwill would be \$50,000.

***PROBLEM 12-13 (Continued)**

A second method to determine goodwill is to apply the Number of Years Method. A simpler calculation, this method multiplies the excess earnings times the number of years it is believed the excess earnings will continue. Based on information you supplied me, we assumed the excess earnings will continue for six more years. Under this method, the value of the goodwill is \$60,000.

A third method to examine is the Times Average Earnings. In this method, you multiply the average earnings by the number of years appropriate for sales of other companies in the same industry. After researching this, I discovered that the Happy Balloon Corporation (a very similar competitor) recently sold for five times its annual earnings. Five times Balloon Bunch's annual income is \$350,000, less the \$400,000 fair value of the assets, equals negative goodwill of \$50,000.

This negative goodwill represents a bargain purchase since the fair value of Balloon's net assets is greater than the \$350,000 purchase price. Before acting on this method, I would like to re-examine the fair value of Balloons net assets and consider whether there might be a reason why Happy Balloon Corporation sold for five times annual earnings, rather than something more.

Based on the calculations we made, the Balloon Bunch Corporation is worth somewhere between \$350,000 and \$460,000. Everything that you pay over \$400,000 will be considered goodwill and will be subject to testing for impairment on an annual basis, or on an interim basis, if circumstances dictate. Any amount you pay less than \$400,000 will be recognized as a gain in net income in the same period that the purchase takes place. Any subsequent impairment in value will be recorded as a loss on the income statement.

***PROBLEM 12-13 (Continued)**

I hope this information will help you make a wise decision.

Sincerely yours,

My Name, Accountant

CASES-Chapter 12

See the Case Primer on the Student Website as well as the summary case primer in the front of the text.

INTEGRATED CASES

IC 12-1 MORROW MEDICAL (MM)

Overview

- Given that the purchase price is based on 5 times net income, management (Dr. Morrow) has a bias to inflate 2013 net income to ensure the greatest return from the sale of MM, whereas the potential buyer has the opposite incentive.
- Company is experiencing cash flow problems – may be a signal that MM is having other problems. Need to further investigate as may be signal of problems with operations or AR collection – could put pressure on company to further bias the numbers to make it look better.
- GAAP is a constraint given that the company interested in buying MM will want financial statements that abide by GAAP, and as auditors, we will need to follow GAAP when we provide our audit opinion. This could be ASPE or IFRS – there is a choice. Unless noted, the GAAPs would be similar for the issues discussed in this case.
- Overall – given our role as auditors we must be careful to ensure that the company is fairly valued to ensure our client is not overpaying for MM. Net income figure is our biggest concern. Conservative approach.

IC 12-1 (Continued)

Analysis and recommendations:

Issue: Revenue recognition – delivery of extra surgical gloves

Recognize sale of gloves	Do not recognize sales
- Given gloves have been shipped to hospitals, risks and reward have been transferred. - Given MM is dealing with hospitals, there is little concern over collectibility. - Given Dr. Morrow's experience as a surgeon, he has experience with turnover related to the gloves. His logic that hospitals will run out of gloves is realistic and thus the sale is measurable. - It is likely that the hospitals will keep all the extra inventory given the hassle of returning the inventory after 8 months.	- Measurement is not estimable given that MM is unsure exactly which hospitals and how many surgical gloves will be returned after the 8-month period. - Hospitals should only be charged for what they ordered – all these extra gloves were not part of the original order and thus should not be recorded as revenue. - Hospitals likely to pay for their orders, but extra inventory was not ordered and collection in doubtful. - First year of the launch of the surgical gloves – returns etc. – are not easy to estimate – if a reasonable estimate could be made then recognition would be possible. - Extra gloves that have been shipped are not the legal responsibility of the customers and as a result include a full right to return goods.

Given that hospitals did not order the extra gloves, a sale should not be recorded for the extra gloves. Dr. Morrow has an incentive to inflate earnings to his advantage. As a result, removing these sales will reduce net income thus reducing the purchase price.

If there is evidence of an estimate of sales returns, recognition of a sale may be possible, however, given our role as auditors for the acquiring company, we need to ensure evidence is reliable.

IC 12-1 (Continued)

Issue: Research & development of MM Surgical Drill

Capitalize	Expense
- Product is clearly defined = MM Surgical Drill. Cost can be identified (this appears to be the only product in the R&D stage). - Product is technically feasible – potential buyer is extremely interested in this product - Dr. Morrow's experience as a surgeon and the fact this project has been in the works since 2010 support this. - Management has intention to produce and market this product – it has been in the works since 2010. If the company is sold, the potential buyer is interested in the MM surgical drill and thus can assume they intend to complete and market it. - MM has technical resources available to complete this project and testing to date has been successful which supports future life and market for product. - Given potential buyers interested – there is a market for this product. - Management intention to bring the product to market in 2015. - Market established – given various market surveys conducted in hospitals throughout Ontario.	- MM is experiencing cash flow problems and thus, there is an issue over adequacy of resources. - Sale of MM is not certain and thus, basing adequacy of resources on sale of MM is questionable.

ASPE allows a choice of either whereas IFRS requires capitalization if stringent criteria are met. Given that the drill meets the criteria for deferral, the costs should be deferred and amortized once the product is in production and sale. Given that the drill represents an asset, it is not unreasonable to capitalize the costs.

IC 12-1 (Continued)

Issue: Which items qualify for deferral?

Deferral	Expensing
- Testing to evaluate product alternatives (\$12K). - Design of the moulds. - Testing of surgical drill evaluation (100K). - Cost of setting up production lab (\$30K) as long as related to drill (may also be treated as a capital asset).	- Marketing and production costs given they relate to surgical gloves not to the drill. - Additional \$25K of tool design costs given already expensed – can't reverse prior year expense.

Dr. Morrow must expense the amounts that do not qualify for development. The GAAPs are similar in this regard.

Issue: Contingent liability

Recognize Loss
- Measurable since MM's lawyers have an estimate of settlement and by implication, the payout is likely. As long as the estimate is reasonable and the future event – settlement of the lawsuit, which is likely – the contingent loss should be accrued by a charge to income. The additional potential contingent liability amount should be disclosed. - ASPE requires recognition of the low end of the range where all amounts in the range are equally probable. - IFRS requires expensing of the best estimate of the payout (expected value). This would be higher than the \$100,000.

It would make the most sense to recognize the expected value.

Overall – following IFRS would provide the best estimate of the economic income.

IC 12-2

Overview

- BI is a new company with a complicated business model – they take CO₂ from their customers and convert it to biofuel. In order to do this, they must build a pipeline and pond on customer land. They then sell the biofuel back to their customers.
- The company is private and the bank has asked for audited statement – therefore may use IFRS or ASPE (first year). Bank will focus on impact on debt to equity ratio (<3:1). ASPE is more flexible (cost versus benefit). Differences are identified and noted below.
- As the accountant – will want to be transparent to the complex business model yet show the company in the best light to the bank as they need ongoing financing.

Analysis and recommendation

Initial contribution of prototype to company- non-monetary and related party

Exchange value	Carrying value
- As a non-monetary transaction, the exchange value is not obvious - Fair value is estimated at \$500,000 – would need evidence to support - Although not in normal course of business – okay as long as evidence to support value as clearly this transaction has commercial substance (prototype for common shares) - May argue that this is an acquired asset (i.e. the company acquired it and so not internally generated) - IFRS does not give specific guidance for valuing non-financial assets - Would positively affect debt to equity and be more transparent as this is the most significant asset the company has	- If cannot substantiate the fair value – may default to carrying value (costs incurred to create) - Which costs to include – i.e. this could be seen as an internally generated intangible asset (research stage) so may be minimal costs included

Conclude and why – likely unable to measure (unless company can get additional evidence to support Sarah's estimate) so would have to ensure properly disclosed.

IC 12-2 (Continued)

Development costs – re prototype – once contributed

Capitalize	Expense
- Clearly future benefit as there is an established market (customers already buying the algae), funding is available through the bank, costs are estimable	- Not sure whether the costs are development (versus research) nor when transferred – whether a market exists - ASPE allows choice to expense even if criteria met

Conclude and why – may need more information but more transparent if recognized on the balance sheet as this is a major asset.

Recognize the pipeline/pond?

Yes	No
- Business model is to get financing from the bank and build these assets which are owned by BI in order to generate revenues - Use the assets to generate revenues (produce algae)	- Assets are on customer's land – access/control? - BI provides construction services to concrete manufacturers and build assets for them - BI paid when biofuel shipped (biofuel priced such that it includes recovery of these costs)

Conclude and why – recognize since legally owned by the company.

Recognize revenues

Rec revenues when biofuel delivered	Rec revenues as construction services provided
- Revenues earned as biofuel shipped and not before (legal title and possession)	- This is really a bundled sale including the services and provision of the biofuel - Must add all revenues together and bifurcate

Conclude and why – if we assume that the pond belongs to BI – then treat as revenue when biofuel delivered to the customer.

Construction costs on pond/pipeline

Capitalize	Expense
- Any costs such as interest, material, labour required to get the assets ready for use - ASPE allow choice for interest	- Costs such as interest are really financing costs and therefore ordinary and ongoing

IC 12-2 (Continued)

Conclude and why – capitalization would allow for an appreciation of the full cost to provide the revenue stream.

Other

- IFRS allows choice to value PP&E at fair value using the revaluation method
- May incur asset retirement obligation costs since assets on customer land and may have to restore at end of life (IFRS based on constructive obligation versus legal)
- Algae may be seen as biological asset and therefore value at fair value less costs to sell (ASPE has no guidance)
- Should the CO₂ be recognized as inventory when piped into the pond? Difficult to measure
- Other

TIME AND PURPOSE OF WRITING ASSIGNMENTS

WA 12-1 (Time 20-25 minutes)

Purpose— to provide students with the opportunity to discuss how intangibles should be valued on a business acquisition, and the implications on net earnings subsequent to the acquisition date. Intangibles that are addressed are customer relationships, a trademark, a non-compete agreement and goodwill. Also students are to discuss impairment testing under IFRS and private entity GAAP..

WA 12-2 (Time 15-20 minutes)

Purpose – to provide the student with the opportunity to discuss the Implications of accounting for web site design costs when the company develops a web for their own use. Students are to refer to SIC 32 and IAS 38 in deciding how the specific costs should be reported.

WA 12-3 (Time 25-30 minutes)

Purpose—to present an opportunity for the student to discuss accounting for patents from a theoretical and a practical viewpoint. The student is required to explain the “discounted value of expected net receipts” method of accounting for patents and to provide support for using cost as the generally accepted valuation method. The student is also required to comment on treatment of patents under IFRS and private entity GAAP. Finally the student must determine proper disclosure in the financial statements for a patent infringement suit which is in progress at the balance sheet date..

WA 12-4 (Time 20-25 minutes)

Purpose—to provide the student with an opportunity to discuss the nature of goodwill and the propriety of recognizing internally generated goodwill in the accounts. The student is required to define goodwill and to indicate reasons why the book and market values of goodwill may differ. Finally, the student must discuss the propriety of eliminating goodwill from the accounts or increasing its book value to reflect market value.

TIME AND PURPOSE OF WRITING ASSIGNMENTS (CONTINUED)

WA 12-5 (Time 25-30 minutes)

Purpose—to provide the student with an opportunity to discuss the reporting of different types acquired intangibles. Examples from the Appendix of IAS 38 are used and the students must discuss the suggested accounting treatment and support the recommendation by applying the general principles of IAS 38.

WA 12-6 (Time 20 minutes)

Purpose—to provide the student with the opportunity to compare IFRS and accounting standards for private enterprises.

SOLUTIONS TO WRITING ASSIGNMENTS

WA 12-1

The first step is to determine the purchase price that has to be allocated. In this case, the fair value of the consideration given up is the cash of \$10 million plus the \$5 million to be paid in one year discounted back one year at a rate of 6%. The total consideration then is \$10 million + \$5 million / (1.06), which totals \$14.72 million.

The next step is to identify all the tangible and intangible assets that have been purchased and determine their fair value at the date of purchase. Generally for intangible assets, the fair values are determined using one of the two methods: an income approach which discounts future cash flows the asset is expected to generate; and the market based approach which looks at what one would have to pay to acquire a similar asset in the market. The following is a list of the intangible assets, and how fair values might be determined:

- Trademark – the value of the trademark is usually determined by discounting the value of royalties that the company would have paid to use the trademark. This is known as the relief from royalty method. The controller should research the market to determine what it would have cost the company in royalty fees for a similar trademark, estimate the number of years the fees would have been paid, and then discount using an appropriate rate. In subsequent years, this trademark will be amortized over the lesser of its legal life or useful life. Although currently, there are only 6 years remaining, this life can be extended indefinitely by paying a small fee. Likely the company will want to continue to maintain the trademark rights, and this will result in unlimited legal life. However, the benefit of this trademark could also be determined to be finite. The controller will have to decide if the trademark is to be amortized over some period of time, or will it have an indefinite life and be tested annually for impairment. Assuming that the controller assumes an indefinite life, there will be no amortization on an ongoing basis, but an impairment loss will result when the recoverable amount (being the higher of fair value less costs to sell and value in use) drops below the carrying value. Under IFRS, this impairment test will be performed annually.

WA 12-1 (Continued)

- Customer relationships – The value of existing customer relationships will depend on the future cash flows from net profits (sales less cost of sales, less asset charges and other costs required to generate the sales) and how long the customer stays with Kolber. These future cash flows are estimated and then discounted to arrive at a value. Existing sales contracts are not required for these relationships to still have value. This asset will be amortized over the period of time each customer will continue to buy products. The controller will probably have estimated this time frame already in determining the future cash flows. Consequently, an amortization expense will be charged annually. Under IFRS, this account will also be tested annually for impairment. The recoverable amount, being the higher of the fair value less costs to sell and the value in use, will be compared to the carrying amount at every reporting date. If the recoverable amount falls below the carrying amount, then an impairment loss will be recorded and the asset written down to the recoverable amount. However, in subsequent years, the impairment loss may be wholly or partially reversed if the inputs into the recoverable amount change.
- Non-compete agreement – The value of the non-compete agreement with the owners is determined by comparing the difference in net cash flows that would be realized by the company with and without the non-compete agreement. One other assumption that might be made is how likely is it that the owners would actually try to compete or would they be interested in some other pursuit. This asset will also be amortized over five years on some basis (e.g., straight line), and the related amortization expense will be charged to the income statement. Under IFRS, this account will be tested annually for impairment. The recoverable amount, being the higher of the fair value less costs to sell and the value in use, will be compared to the carrying amount at every reporting date. If the recoverable amount falls below the carrying amount, then an impairment loss will be recorded and the asset written down to the recoverable amount. However, in subsequent years, the impairment loss may be wholly or partially reversed if the inputs into the recoverable amount change.
- Goodwill – goodwill is by definition, the difference between the fair value of the consideration given up, which is \$14.72 million, less the fair values attributed to the tangible assets, the liabilities, and the three identified intangibles above. Goodwill is not amortized but is tested annually for impairment. Under IFRS, the carrying value of the cash generating unit (CGU) to which the goodwill belongs (which in this case would likely be this manufacturing plant) is compared to the recoverable amount of the CGU (equal to the higher of the fair value less costs to sell and value in use). If the recoverable amount is less than the carrying amount, then the goodwill is written down by the difference. (If the difference is greater than

WA 12-1 (Continued)

the goodwill, then any remaining amount would be prorated to the other assets of the CGU based on their relative carrying amounts.)

Under ASPE, the testing of impairment of goodwill is only performed when there are circumstances or events that indicate a possible impairment. If the fair value of the reporting unit (again in this case, probably the manufacturing facility) is less than the carrying value of the reporting unit, then the goodwill is written down by the difference.

WA 12-2

A company's web site could qualify as an intangible asset if it meets the two criteria required by IAS 38.21: it is probable that expected future economic benefits attributable to the asset will flow to Weaver, and the costs can be reliably measured. Certainly the costs can be reasonably measured. However, only the part of the web site that is used by customers to place orders will generate any future economic benefits for the company. The other part of the site that is used for marketing and advertising material will not directly generate future benefits and any related costs will be immediately expensed.

For the customer order site costs, these can be capitalized only once the development stage has been reached. Costs incurred during the research phase must be expensed. Once Weaver can demonstrate the six criteria required by IAS 38.57 have been met, costs incurred during the development stage can be capitalized. The analyses of these six criteria with respect to Weaver's customer order site are as follows:

- (a) Technical feasibility so it is available for use – the testing by the software developers has shown this to be true.
- (b) Weaver's intention to complete and use it – the Board of Directors has approved the plan and budget for this web site to be completed.
- (c) Weaver's ability to use the web site – this has been demonstrated by testing of the site.
- (d) How the asset will generate future economic benefits – customers will now use the site to place their orders which will generate direct revenues for the company.
- (e) Availability of technical, financial and other resources to complete the development – The Board has approved the budget for the site, and the company has hired on the specialists required to develop the site.
- (f) Ability to measure the costs attributable – the costs are being tracked separately and managed by the IT manager.

The following is how each of the costs incurred will be reported by Weaver and the supporting reasons:

- the IT manager's salary for the six months required to supervise the project – these costs for management salaries would be considered administrative costs and are specifically excluded from capitalization under IAS 38;
- legal fees to register the domain name – are part of the development phase and could be capitalized;
- consulting costs for a feasibility study – this is part of the research phase and will be expensed;

WA 12-2 (Continued)

- purchase of the hardware - is equipment and will be capitalized and amortized under IAS 16;
- software developers to develop the code for the application, installation and testing of the software – this represents part of the development phase and only the costs related to the customer order site will be capitalized; costs related to the marketing site will be expensed;
- graphical artist to design the layout and colour for the web pages - this represents part of the development phase and only the costs related to the customer order site will be capitalized; costs related to the marketing site will be expensed;
- photographers to take pictures of the products to be shown on the site – these costs are related to the marketing of the product and are immediately expensed;
- staff costs to upload all the information to the site pertaining to company description and products – these costs relate to marketing and are expensed;
- staff time to upload all the information to the site pertaining to the data required for customers to make orders including prices, entry data screens and shipping options – these costs are part of the development phase and will be capitalized;
- Training costs for the employees on using the software – these costs are specifically excluded from capitalization under IAS 38.

Once the web site is operational, ongoing costs to update prices and content, add new functions, and back up the data will be expensed. The web site must also be amortized over its useful life. Due to the fact that technology and software rapidly change, the website will be susceptible to technological obsolescence. SIC 32 suggests that this useful life will be short (one to three years).

WA 12-3

- (a) A dollar to be received in the future is worth less than a dollar received today because of an interest or discount factor—often referred to as the time value of money. The discounted value of the expected royalty receipts can be thought of either in terms of the present value of an annuity of royalty receipts; or in terms of the sum of the present values of several years' individual royalty receipts .
- (b) If the royalty receipts are expected to occur at regular intervals and the amounts are to be fairly constant, their discounted value can be calculated by multiplying the value of one such receipt by the present value of an annuity of 1 for the number of periods the receipts are expected. On the other hand, if receipts are expected to be irregular in amount or if they are to occur at irregular intervals, each expected future receipt would have to be multiplied by the present value of 1 for the number of periods of delay expected. In each case, some interest rate (discount factor) per period must be assumed and used. As an example, if receipts of \$10,000 are expected each six months over the next ten years and an 8% annual interest rate is selected, the present value of the twenty \$10,000 payments is equal to \$10,000 times the present value of an annuity of 1 for 20 periods at 4%. Twice as many periods as years and half the annual interest rate of 8% are used because the payments are expected at semi-annual intervals. Thus the discounted (present) value of these receipts is \$135,903 ($\$10,000 \times 13.5903$). Because of the interest rate, this discounted value is considerably less than the total expected collection of \$200,000. Continuing the example, if instead it is expected that \$10,000 will be received six months hence, \$20,000 one year from now, and a terminal payment of \$15,000 is expected 18 months hence, the calculation is as follows:

$\$10,000 \times \text{present value of 1 at 4\% for 1 period} = \$10,000 \times .96154 = \$9,615.$

$\$20,000 \times \text{present value of 1 at 4\% for 2 periods} = \$20,000 \times .92456 = \$18,491.$

$\$15,000 \times \text{present value of 1 at 4\% for 3 periods} = \$15,000 \times .88900 = \$13,335.$

Adding the results of these three calculations yields a total of \$41,441 (rounded), considerably less than the \$45,000 total collections, again due to the discount factor.

WA 12-3 (Continued)

(c) Evidently the cartons were developed and the patents obtained directly by Bearcat Limited. ASPE allows a choice as to whether to expense these development costs or capitalize the costs if certain criteria are met. IFRS requires the costs to be capitalized if certain criteria are met. The criteria under ASPE and IFRS are the same with respect to when internal expenses can be capitalized. The basis of valuation for patents that is generally accepted in accounting is cost. These products have been on sale for the past three years, prior to which the company would have incurred research and development costs. Only directly attributable costs incurred in the development phase could have been capitalized in previous years, and capitalization could not have commenced until all six criteria for recognition were demonstrated. These six criteria include: technical feasibility, entity's intentions to sell the or use the asset, entity's ability to use or sell the asset, availability of resources to use or sell, how future benefits will be received, and the ability to measure the costs associated with the development of the asset. It is likely that these costs were all expensed at the time. Once the patent is registered, the fees paid for this registration can be capitalized. In addition, any legal costs required to successfully defend a patent infringement suit could also be capitalized. Amortization of the patent would be over the shorter of its legal life (20 years) or its useful life to the entity. Events that could shorten the useful life of the patent would include: no more licensing fees being generated or a new process has been developed for the production of the containers. Amortization can either be based on time (straight-line basis) or over a certain number of units produced.

Subsequent to capitalization, the patent needs to be tested for impairment. Under ASPE this is done when events or circumstances indicate that carrying value may be less than the recoverable amount. The cost recovery method is used, whereby the first step is to determine whether or not the total future cash flows to be generated from the patent are less than its carrying value. If this is the case, then the patent will be written down to its fair value (discounted cash flows) if it is less than its current carrying value.

Under IFRS, the impairment is tested annually using the rational entity impairment model. The carrying value is compared to the higher of the fair value less costs to sell or the value in use. If the carrying value is lower than this recoverable amount, then the asset is written down to the recoverable amount. In subsequent years, the impairment loss could be partially reversed if the estimates used to determine the recoverable amounts have changed.

WA 12-3 (Continued)

As noted earlier, if the infringement suit is successful, the attorney's fees and other costs of protecting the patent should be capitalized and amortized over its remaining useful or legal life, whichever is shorter. However, if the suit is unsuccessful, this will impact the impairment test for both ASPE and IFRS. It may be that the recoverable amounts under both standards become less than the carrying value. Any legal and other costs incurred if the suit is lost would be expensed immediately.

- (d) The value suggested by the financial VP is a fair value. IFRS does allow a choice for some intangible assets to be valued using the cost model or the revaluation model. However, the revaluation model is only available for intangible assets that have an active market and the fair value can be determined using these quoted market prices. In this case, the patents are unique and do not have quoted market prices. Consequently, the cost model must be used as explained earlier.
- (e) The litigation can and should be mentioned in the notes to the financial statements. Some indication of the expectations of legal counsel in respect to the outcome can properly accompany the statements. It would be inappropriate to record a contingent asset reflecting the expected damages to be recovered. Costs incurred to September 30, 2014, in connection with the litigation could be recorded as prepaid until the outcome is determined. However, the conventional treatment would be to charge these costs as ordinary legal expenses. If the final outcome of the litigation is successful, the costs of prosecuting it could then be capitalized. Similarly, if the client were the successful defendant in an infringement suit on these patents, the generally accepted accounting practice would be to add the costs of the legal defence to the Patents account.

Developments between the balance sheet date and the date that the financial statements are authorized for issue are assessed to determine if these events are adjusting events or non-adjusting events (IAS 10). If the case is settled during this period, then this represents an adjusting event and an adjustment would be made to the financial statements to reflect this settlement.

WA 12-4

- (a) Goodwill in accounting is “an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized” (IFRS 3, Appendix A). It is the difference between the fair value of the consideration given up to acquire a business and the fair value of all the identifiable net assets acquired.
- (b) The book and market values of the goodwill of Echo Corp. differ because of changes in conditions since the date of acquisition. Only purchased goodwill can actually be recorded. Goodwill that is internally generated is not capitalized. One reason for this is that it is difficult to isolate the costs directly attributable to goodwill increases. In fact, there may, in some cases, be no outside expenditures. A second reason is that one cannot be certain that the conditions out of which goodwill arises will continue to exist in the future and therefore that future economic benefits will be received by the company and attributable to the goodwill. Since the date of acquisition, conditions have improved and along with them the market value (but not the book value) of goodwill. For example, sales volume has increased and the market demand is generally more favourable. The interest of investors also may have increased with the growth rate in sales by Echo Corp. Inflation, too, may have had some effect on the market value of goodwill, but its effect should be eliminated since general changes in the price level represent only a change in the value of the monetary unit.
- (c) 1. It is not acceptable practice to enter goodwill on the books unless it is purchased; therefore, it would not be proper to increase the stated value of goodwill and violate the historical cost principle. In addition, this should have no effect on the amount paid for goodwill by the competitor. The competitor will set the price based on future cash flows and earnings of the company and current net asset values, and not what is presented on the historical cost balance sheet.
2. This would also be improper. The value of the goodwill may have increased (as would be evidenced by the negotiated purchase price), although such increase in value would not be included in the accounts. Goodwill should be eliminated from the balance sheet and a corresponding loss recognized only if the circumstances indicate that goodwill has been impaired to the point of being worthless.

WA 12-5

The illustrative examples accompanying IAS 38 outlines the suggested guidance. Students should apply the following factors in determining if the asset has a useful life that is finite (and if so, how many years) or indefinite include (IAS 38, par 90):

- expected usage by the entity;
- typical product life cycles and any public information on useful lives of similar assets used in similar ways;
- technical, technological, commercial or some other type of obsolescence;
- the stability of the industry in which the asset operates and changes in the market demand for the output of the asset
- actions that competitors might take;
- company's ability and intention to maintain a certain level of maintenance required to ensure that future benefits continue to flow to the entity;
- period of legal control over the use of the asset;
- other limits on the use of the asset such as the expiry dates of related leases
- the useful life on dependent assets; and
- the entity's ability to renew contractual or legal rights and the related costs in comparison to future benefits.

WA12-6

Generally, ASPE has been designed to reduce the complexity in recognizing intangible assets and testing the assets for impairment. In addition, unless there were strong reasons for changing policies, common practices in Canada have been maintained. Finally, the amount of note disclosure has been significantly reduced to save costs in preparing financial statements for private enterprises.

The major differences between ASPE and IFRS are as follows:

- Interest costs may or may not be capitalized for private enterprises during the development process. IFRS does not allow a choice, and mandates that interest be capitalized based on pre-defined formulas. Consequently, private enterprises following ASPE can choose to expense interest costs, which will be a simpler method, as compared to tracking the relevant interest to capitalize.
- ASPE allows development costs to be expensed or capitalized when the six specific criteria have been met. If the company chooses to expense these costs there is no need to keep track of this information. IFRS mandates that these costs be capitalized.
- In reporting periods subsequent to acquisition, only the cost model can be used under ASPE. Under IFRS, there are choices of the cost model or revaluation model for intangible assets. Determining fair values can be time-consuming, expensive and require a sophisticated level of knowledge that some private enterprises may not be able or want to afford.
- The impairment testing under ASPE is far less onerous than under IFRS. First of all, testing of impairment only needs to be done when events or circumstances indicate that the carrying amount might be impaired. (IFRS requires this to be completed at every reporting date.) Secondly, for limited life intangibles, the impairment test under ASPE has a first step to total the future cash flows generated by the asset to determine whether the asset's carrying value will be recovered. At this point, only if this test fails, must an appropriate discount rate be calculated and a fair value determined as part of the second step. This is far less complex than having to determine the fair value initially, as required under IFRS.
- The impairment testing for goodwill is also different under ASPE in comparison to IFRS. The fair value of the reporting unit is compared to its carrying value. (Under IFRS, it is a cash generating unit that is used). When the fair value is less than the carrying value, an impairment loss is recorded for the difference. The reason for using the reporting unit is to stay with Canadian practice since preparers are currently familiar with this method.

WA 12-6 (Continued)

- The final difference in accounting for impairments is that under ASPE, there is no reversal of the write down allowed. This means that the entity does not have to keep track of the write-downs by asset or the carrying costs of the assets as if they had not been written down. This type of information is required under IFRS since write ups are allowed but only to the amount the carrying value of the asset would have been if the impairment write down had not been made.
- Only basic disclosures describing the accounting policies on amortization, the balances of goodwill and classes of intangibles, and details of impairment losses are required. In contrast, IFRS requires significant disclosures including detailed reconciliations of the opening and closing balances of each type of intangible asset and goodwill, detailed information on determination of fair values and assumptions and methods used for determining impairment losses. These disclosures under IFRS are extremely time consuming and have been eliminated under ASPE.

RESEARCH AND FINANCIAL ANALYSIS

RA 12-1 British Airways Plc

- (a) British Airways reports goodwill, landing rights, emission allowances and software as intangible assets. The reported amounts in the notes were :
(all amounts in millions of British Pounds – from Note15)

	Cost	Accumulated amortization	Net book value
Goodwill	40	0	40
Landing rights	301	59	242
Emission allowances	12	0	12
Software	201	148	53

Note 2 explains the accounting policies used by the company.

Landing rights are acquired from other airlines. Those landing rights that are outside of the EU are amortized on a straight-line basis over no more than 20 years. Capitalized landing rights based within the EU are not amortized, as regulations within the EU consider them to have an indefinite economic life.

British Airways has capitalized the cost of purchase or development of software. There are no details provided on the nature of this software and how it is used by the company. It is amortized over four years on a straight-line basis. The software is tested for impairment when events or circumstances arise to indicate that carrying value is greater than the recoverable amount. (Under IFRS this should be tested at least annually.) Goodwill arises on business acquisitions and is annually tested for impairment. In anticipation of the European Emissions Trading Scheme starting on January 1, 2012, the company has purchased emission allowances that are initially recognized at cost and tested for impairment whenever indicators exist that carrying value may not be recoverable.

RA 12-1 (Continued)

- (b) From Note 15, the group outlines how the group paid £34 million for landing rights. The indefinite life intangibles are assigned to a cash generating unit for the purposes of impairment testing. In this case, £ 267 million (of a total £294 million) was allocated to a cash generating unit called “Network airline operations” and EUR 27 million was allocated to “OpenSkies”.
- (c) Note 16 outlines the details of the goodwill impairment test. Goodwill is analysed also by two cash generating units - “Network airline operations” and “OpenSkies” – the same two noted above for the landing rights. For Network airline operations, the recoverable amount was determined based on value in use using a discounted cash flow model based on the company’s five year plan which includes a planned expansion. Beyond the 5 years, the company has used a constant growth rate of UK long term growth which is 2.5% to forecast the cash flows. The company’s post-tax weighted average cost of capital adjusted for specific market risks used to discount the cash flows was 10%. Other key inputs are the operating margin of 2.9% to 8.1% and fuel price per barrel of \$114 to \$120. The total recoverable amount for the Network airline operations was determined to be £2.3 billion greater than the carrying value, resulting in no impairment loss. If the discount rate were increased by 610 basis points or the operating margin were to decrease by 44 per cent, the excess would amount to nil.

The OpenSkies’ CGU has also been measured using its value in use as the recoverable amount. Assumptions are similar to those stated above, except long term growth rates beyond the management’s five year plan are determined using the EU’s long term growth assumption – which is also 2.5%. The operating margins of (10.4%) to 4.7% have been estimated assuming that planned business efficiencies will be accomplished. The assumptions for fuel charges and discount rates are the same as above for Network airline operations. There was no impairment deemed as the recoverable amount exceeds the carrying value.

There is a very wide range used for the operating margins. In order to see how reasonable these are, the user could look historically to see what the company actually achieved. Given economic conditions, these assumptions may be reasonable. One could question whether or not planned efficiencies should be incorporated into margins, since these have not yet been achieved.

RA 12-1 (Continued)

- (d) There are a lot of assumptions that go into determining the recoverable amounts. By giving users the key assumptions that have been used, users can decide whether or not they are reasonable. Without this information, the user would have no understanding of how the values were determined and might try to guess at the assumptions used. By providing details, more credibility is given to the final numbers used. Also, the sensitivity of the numbers, and which changes in the assumptions would result in a recoverable amount equal to the carrying value are also helpful. As can be seen from above, it only takes small changes in the assumptions to reduce the value in use.

RA 12-2 Rights to use sport celebrities to advertise products.

There are several articles that can be found on this topic. (The following information was taken from “Nike Golf Extends Contract with Tiger Woods”, from Sports Business Radio, March 2006; and from Men’s Golf article, “Will Rory McIlroy Join Tiger Woods at Nike?” from October 2012.) The first deal signed with Tiger Woods was in 1996. The agreement was for five years and Nike agreed to pay a total of US\$40 million. In 2001, another five year deal was signed, this time for US\$100 million. In 2006, a new deal was signed for another five years, for at least another US\$100 million (although the actual amounts were not disclosed). In light of some of the negative publicity surrounding Tiger’s personal life in 2009 and 2010, several sponsors did not renew their endorsement deals with Tiger. However, it has been reported that Nike renewed its deal, but for a significantly lower amount (reportedly \$35 million per year). Tiger also has received a percentage of each sale of Nike Golf items including: apparel, footwear, equipment and balls.

Nike reports these endorsement expenses as part of advertising costs. Under Note 1, Demand Creation Expense, the company explains that a large amount of the promotional expenses are incurred under endorsement agreements. The accounting for these agreements is based on the specifics of the contract. Usually, the payments are expensed on a straight-line basis over the term of the contract and any prepayments under the contracts are recorded as a prepaid or other asset depending on the period the prepayment relates to. In the case of Tiger Woods, if we assume that an annual payment is made at the beginning of the year, this would be recorded initially as prepaid and then expensed on a straight-line basis over the 12 months. In addition, the “royalty” on each Nike Golf sale would be expensed as the sale is made, and an accrual owing to Tiger Woods recorded.

Under IAS 38, to qualify as an intangible asset, it must be probable that future expected benefits will flow to Nike and are directly attributable to the asset; and the cost of the asset can be measured. With hindsight, Nike might be able to attribute the increase in their Nike Golf sales directly to their agreements with Tiger Woods. However, in looking forward at the timing of the contracts, this might not be so readily determined or justified. As long as Tiger continues to do well in golf tournaments, you could argue that the endorsement likely increases sales. But what happens if Tiger should start to lose tournaments, and other players become more popular? Regardless, under IAS 38, costs related to advertising and promotion of products **cannot** be included in costs of intangible assets. As these endorsement costs are seen as promotional expenditures, they are specifically excluded under IAS 38.

RA 12-3 COMPARATIVE ANALYSIS

(a) and (b)

	Amount	Accum. Amort. Reported?	Impairment reported?	Amort. Policies
Real estate and construction				
Brookfield Asset Management	(\$ millions)			
Dec 31, 2011				
Goodwill	\$2,607	N/A	30	Test for impairment annually at least
Intangible Assets	\$3,848	242	None	Test for impairment annually or more frequently when events occur. Amortized S-L over estimated useful lives.
Intangible assets - other	120	Not disclosed	None	Test for impairment annually or more frequently when events occur Amortized S-L over estimated useful lives.
Total Assets	\$91,030			
Percentage of Total Assets	7.2%			

RA 12-3 (Continued)

	Net Amount	Accum. Amort. Reported?	Impairment reported?	Amort. Policies
Food stores – merchandising				
Loblaw Companies Limited	(\$ millions)			
<u>Dec 31, 2011</u>				
Goodwill	948	N/A	No	Not amortized; Tested for impairment annually
Trademarks and Brand Names	51	N/A	No	Not amortized; Tested for impairment annually
Internally generated intangible assets	20	8		Intangible assets with a definite life are amortized on a straight-line basis over the related assets' estimated useful lives. Impairment is tested at least annually.
Other intangible assets	43	25		Intangible assets with a definite life are amortized on a straight-line basis over the related assets' estimated useful lives. Impairment is tested at least annually.
Total Assets	17,428			
Percentage of Total Assets	<u>6.59%</u>			

RA 12-3 (Continued)

	Amount	Accum. Amort. Reported?	Impairment reported?	Amort. Policies
Biotech and Pharmaceuticals				
Aeterna Zentaris Inc.	(US \$ thousands)			
December 31, 2011				
Goodwill	9,313	N/A	No	Impairment test annually
Identifiable intangible assets (not separately disclosed)	1,769	36,213	Current year impairment of 1,093 for Cetrotide asset.	If finite useful life, amortized using S/L. Estimated useful life is 8- 15 years for in-process R&D and patents; 10 years for trademarks. Finite useful life assets are tested for impairment only when events suggest that recoverable value is less than carrying value.
Total Assets	<u>75,369</u>			
Percentage of Total Assets	14.70%			
Accumulated Amortization (intangibles) [Note: Cost = 37,982 and CV = 1,769]	36,213			

RA 12-3 (Continued)

	Net Amount	Accum. Amort. Reported?	Accum. Impairment reported?	Amort. Policies
Publishing				
Quebecor Inc.	(\$ millions)			
Dec 31, 2011				
Goodwill	3,543.8	N/A	No	Impairment test performed annually at least.
Customer relationships, non-competition agreements and other	117.5	102.2	No	Amortized using straight-line over useful life 3- 10 years. Annual impairment test at least.
Mastheads	62.6	48.2	No	Amortized using straight-line over useful life 3- 10 years. Annual impairment test at least.
Broadcasting licenses	102.6	N/A	0.8	Annual impairment test, but no amortization as an indefinite life.
AWS spectrum licenses	391.7	66.8	No	Amortized using straight-line over useful life of 10 years. Annual impairment test.
Software	237.2	213.1	No	Amortized using straight-line over useful life of 3- 7 years. Annual impairment test at least.
Under development	129.4	N/A	No	Indefinite life – no amortization. Annual impairment test at least.
Total intangible assets	4,583.8			
Total Assets	9,038.8			

RA 12-3 (Continued)

	Net Amount	Accum. Amort. Reported?	Accum. Impairment reported?	Amort. Policies
Percentage of Total Assets	50.71%			
Accumulated Amortization (intangibles)	431.1			

As per Note 6 of the financial statements, Quebecor had impairment losses of \$1.5 million but the note disclosure did not provide how much of the impairment losses were attributable to intangible assets

RA 12-3 (Continued)

(a), (b), (c), (d) See previous charts.

(c) As can be seen from the previous charts, the percentage of funds invested in intangible assets varies greatly from very low amounts for real estate and food retailers to the highest percentage in publishing. Pharmaceuticals was in between.

A large investment in intangible assets, with various types of intangible assets, would be expected in the biotech and pharmaceutical industry since the companies in this industry sell unique products that are subject to legal protection and that are developed at great cost. Intangible assets would therefore constitute a higher percentage of total assets. The publishing company, Quebecor, also had broadcast and spectrum licenses, which are a significant intangible asset for this industry. A low percentage of intangible assets would be expected for the real estate and the food retail industry where much of the investment is in tangible assets such as land and buildings.

With large companies such as the ones selected, goodwill would be expected since the companies' growth is frequently achieved by acquiring other companies. The types of intangibles also differed across the industries. However, in real estate, lease and tenant relationships are unique. This would be similar to the customer relationships for the printing industry. For the pharmaceuticals, of course, technology and brands are important. Licenses are common for the pharmaceutical and printing industries, but the type of licenses would differ. And finally, for the printing industry, mastheads and spectrum licenses are unique. It can be seen that the policies are all very similar.

(d) The amortization policies are very similar across the industries. Of course, goodwill is not amortized and is tested annually for impairment, as are the intangible assets with indefinite lives. For those intangibles with definite lives, all companies use a straight-line basis over the useful life method. These similarities are not surprising since intangibles are usually not subject to a determination of useful life based on physical properties (such as wear and tear) that lend themselves to methods such as units-of-production.

The useful lives varied from as short as 3 years for computer software to as long as 20 years for lease and tenant relationships for the real estate company. In the printing company these customer relationships are amortized over a much shorter period of 3 to 10 years. However, this likely makes sense, since companies will be reluctant to move from their leased offices and buildings.

RA 12-3 (Continued)

(e) See previous chart for the amounts of accumulated amortization reported for each company.

Brookfield Asset Management disclosed an impairment charge of \$30 million for goodwill in 2011. Note 12 disclosed the amount of the impairment but no further information was disclosed.

In the case of Aeterna Zentaris, an impairment charge of \$1,093,000 was reported on the income statement as additional amortization expense. Note 12 provided disclosure, explaining the calculation of value in use for the impairment test. The disclosure outlines the discount rate, time period and growth rates used. In comparison to Brookfield, a lot more detail was provided in this case.

RA 12-4 L'Oreal

(a) L'Oreal reports the following intangible assets:

	in millions of EURs at net book value	Additions
Goodwill	6,204.6	418.8 (net of disposals)
Brands (trademarks) with a indefinite life span – primarily The Body Shop, Matrix, Kiehl's and Shu Uemura	1,454.3	0
Depreciable brands (trademarks) and product ranges	74.4	0.7
Licenses and patents	930.4	9.0
Other	998.4	98.6
Total net amounts of intangible assets	9,662.1	
Total assets	26,857.6	
Percentage of intangible asset to total assets	35.98%	

(b) Note 1 details the accounting policies for the intangible assets as follows:

- Goodwill is not amortized and is tested annually for impairment.
- All of the intangible assets are also tested annually for impairment.
- International trademarks (brands) have an indefinite life span and are tested for impairment if an unfavourable event occurs but at least annually during the fourth quarter. Examples of unfavourable events are decreases in sales or margins and increases in discount rates.
- Local trademarks (brands) which are gradually replaced by international trademarks have a limited life.
- Product ranges includes costs from acquisitions that relate to product concept, complementary name, formulas patents, packaging, logos, advertising trademarks, etc. These costs are amortized over the remaining life span which is indicated when the packaging, name, formulas and patents are no longer used.
- The company also capitalizes patents and formulas it has developed. The depreciation period of the patent is its legal life.
- Formulas are depreciated over a maximum of 5 years.

RA 12-4 (Continued)

(c) The following methods and assumptions are used for the impairment tests:

- Goodwill is allocated to Cash Generating Units which are one or more of the brands as shown in Note 11. Recoverable amounts are determined using a value in use method. Future cash flows are forecasted for the next 10 years since this is the amount of time required for strategic positioning of an acquisition, using reasonable growth rates for sales determined from market data and the constant growth rate beyond the 10 year period of 3% in most cases. The cash flows are discounted at the company's weighted average cost of capital which was 7.9% adjusted for country specific risk. Fair value less costs to sell method is only used where details of similar recent market transactions are easily available.
- Trademarks are valued using the value in use method and two approaches are adopted:
 - i. Premium based approach – which compares future cash flows specifically generated by the trademark with cash flows generated without the trademark and the difference, is discounted.
 - ii. Royalty based approach – which estimates the value of the trademark using the royalties that would have had to be paid in the future on a similar trademark, and using company prepared sales forecasts.

The company's weighted average cost of capital as explained above is used to discount these cash flows. Terminal growth rates are determined based on market data and was 3% except in specific cases.

- The value of a patent or a formula is determined using the royalty based approach described under trademarks.
- Note 13 outlines the specific discount rates used for significant CGUs including: Lancôme, L'Oreal Paris, Maybelline/Garnier and The Body Shop. The discount rates differ whether the cash flows are generated from the US or internationally and range from a low of 7.9% to a high of 8.9%.
- Also described in Note 13 are the sensitivities. A discount rate increase of 1-point on all CGUs would result in an impairment loss of EUR 21.3 million. Similarly, a 1-point increase in the terminal growth rate on all CGUs would result in an impairment loss of EUR 12.7 million.

RA 12-4 (Continued)

In reviewing the assumptions, it would have been helpful to know the operating margins used and the sales growth rates used to better assess the reasonableness of the recoverable amounts determined. The terminal growth rates and discount rates appear reasonable. However, the 10 year forecast period appears very long and often companies use 5 years.

There was an impairment loss related to the goodwill of Softsheen Carson for EUR 31.8 million and Sanoflore for EUR 5.3 million. Additionally, there was an impairment loss related to the Softsheen Carson brand of EUR 32.8 million.

- (d) The company has research and development costs. Research expense is immediately expensed as incurred. The expenses incurred during the development phase are capitalized to intangible assets when the criteria of IAS 38 are met. However, the company states that due to the large number of development projects and the uncertainty about launching the products, not all of these criteria can be met. The company also capitalizes the development costs related to software for internal use which include the costs of programming, code, testing phases and significant upgrades. Any developments costs that are capitalized are amortized over a probable useful life of 5 to 7 years. These capitalized amounts are likely included in "Other intangible amounts" in the above schedule. During the year, the company expensed EUR 720.5 million.
- (e) The company also incurs advertising and promotion expenses for selling to customers and consumers, which are all immediately expensed as incurred. During the year, the company incurred EUR 6,291.6 million for these expenses.
- (f) As per Note 2, L'Oreal acquired Pacific Bioscience Laboratories Inc. and the brand Clarisonic. In addition, several subsidiaries made acquisitions that have resulted in consolidation for financial reporting purposes. Intangible assets and goodwill acquired totalled EUR 320.8 million and EUR 415.6 million, respectively.

RA 12-5 Regulated Assets

- (a) Utility companies in Canada have regulatory assets and liabilities. Regulatory assets “represent the right to increase future rates from what would otherwise not be allowed”. Regulators set regulated future prices so that future expected costs of providing these services can be recovered. However, when the company incurs higher than these expected costs, these cannot be expensed. Future rates will increase so that earlier costs incurred that were not allowed to be expensed can be recovered by the entities. Regulated assets represent these deferred costs that the entity hopes to recover with increased regulated rates (ie. higher revenues). Consequently, to qualify as an asset, and have probable future economic benefits flow to the entity from these assets, the company must be able to charge higher rates in the future and also collect from the customer. The probability of this will depend on the regulatory and economic environment.
- (b) The current issue is that under IFRS there are no standards on how to report and measure regulatory assets. IAS 38 on intangible assets is the only standard that could be applied. So the issue is to what extent can these assets be recognized as intangible assets?
- (c) IAS 38 defines an intangible asset as a “non-monetary asset with no physical substance” which is identifiable. Also under IAS 38, the company must have the right to control the benefits that arise from the asset; it is probable that future cash flow attributable to the asset will flow to the entity, and that the costs are measureable.

It appears that future cash flows can be expected from this right due to the ability to charge the higher rates, and the costs are measurable. However, the criteria of “control” and “identifiability” are not so obvious. Control implies that the entity has the power to ensure that it will receive the cash flows. However, it is the regulator who has the power to determine whether or not the entity can charge the higher rates and receive these future cash inflows. Not until this decision is made, does the company actually have the power to charge the higher rates. However, if the entity is sufficiently certain that these benefits will be received, and has evidence to support this assessment, would that be enough to recognize the asset even though to be 100% certain the entity needs the regulator’s approval? If yes, then the asset could be recognized under IAS 38.

RA 12-5 (Continued)

Identifiability is determined under IAS 38 if the asset can be separately sold or transferred, or arises from contractual or other legal rights. These rights to increase revenues due to increased regulatory rates could be sold. Is this enough to make the asset separately identifiable under IAS 38? The rights do arise from a legal right, but this legal right does not arise until the regulator has given approval. IAS 38 does discuss the future renewal of legal rights (i.e., trademarks for example) and that the useful life can be based on these future renewal rates if the cost is not significant and there is evidence to support renewal. Using this rationale, if it is probable that the regulator will grant this right, (and the evidence is that they have done so in the past) then could we argue that these regulated assets qualify as an intangible asset?

Finally, where there is not a specific standard dealing with an accounting issue, IAS 8 allows the use of standards dealing with similar and related issues to be used for guidance. IAS 38 could then be applied in these special circumstances and the regulated assets could be recognized.

CUMULATIVE COVERAGE

(a)

Item 1.

Land — Saskatchewan	500,000	
Factory Building — Saskatchewan	1,500,000	
Office Equipment— Saskatchewan.....	250,000	
Interest Expense	75,000	
Asset Additions and Disposals		2,325,000

Since FFI has adopted the policy of not capitalizing interest, the avoidable interest is expensed.

Item 2.

Equipment—Ontario	1,667	
Office Equipment— Ontario (\$833 + \$500) ...	1,333	
Asset Additions and Disposals (\$2,500 + \$500)		3,000

	Fair Value	% of Total	Cost	Recorded Amount
Equipment	\$ 2,000	2/3		\$ 1,667
Office Equipment	<u>1,000</u>	1/3		<u>833</u>
	<u>\$3,000</u>		<u>\$2,500</u>	<u>\$2,500</u>

Item 3.

Asset Additions and Disposals	10,000	
Accumulated Depreciation — Vehicles	10,000	
Loss on Disposal of Vehicle.....	5,000	
Vehicles		25,000

Note: No depreciation is recorded on the vehicle disposed of in year of disposition.

CUMULATIVE COVERAGE: (Continued)

Item 4.

Equipment — Saskatchewan.....	4,212,360	
Notes Payable.....		4,212,360

The present value of an annuity of \$1,000,000 for five periods at 6% imputed interest is calculated as follows:

PV of annual payment of \$1,000,000 X 4.21236* \$4,212,360
 * (PV factor for ordinary annuity for 5 years at 6%)

Excel formula =PV(rate,nper,pmt,fv,type)

Using a financial calculator:

PV	\$?	Yields \$ 4,212,364
I	6%	
N	5	
PMT	\$ (1,000,000)	
FV	\$ 0	
Type	0	

Interest accrued at year end for one month on interest incurred from the date of signing the note payable.

Interest Expense	21,062	
Notes Payable.....		21,062
(\$4,212,360 X 6% X 1/12 = \$21,062)		

CUMULATIVE COVERAGE: (Continued)

Item 5.

Office Equipment—Ontario (new)	4,000	
Accumulated Depreciation—Office		
Equipment—Ontario	3,000	
Office Equipment—Ontario (old).....		7,000

Note: No gain is recognized as this transaction is a non-monetary exchange of similar assets that lacks commercial substance.

Item 6.

Repair Expense (\$4,000 + \$10,000)	14,000	
Equipment—Saskatchewan.....	25,000	
Asset Additions and Disposals		39,000

Some students might put the \$25,000 cost of the security system into the Building account. Because its useful life is likely shorter than 20 years, it is better to recognize it separately as equipment.

Item 7.

Development Costs*	390,000	
Research Expense.....	50,000	
Advertising Expense.....	47,000	
Asset Additions and Disposals		487,000

***(\$350,000 + \$40,000). This assumes all six capitalization criteria have been met at the point these costs were incurred.**

CUMULATIVE COVERAGE: (Continued)

Depreciation Expense —Building	235,000	
Accumulated Depreciation —		
Building—Ontario		235,000
(\$10,875,000 – \$5,000,000 ÷ 25)		
Depreciation Expense —Building	36,250	
Accumulated Depreciation —		
Building—Saskatchewan		36,250
(\$1,500,000 – \$50,000 ÷ 20 years X 50%)		
Depreciation Expense —Equipment	1,644,453	
Accumulated Depreciation —		
Equipment—Ontario		1,644,453
Beginning Balance:		
Cost	23,756,000	
Less: Accumulated depreciation	<u>17,179,022</u>	
Carrying amount January 1, 2014	6,576,978	
Item 5 has nil effect on carrying amount		
X 25%		1,644,245
Additions during 2014 (Item 2)	1,667	
X 25% X 50%		<u>208</u>
Total		<u>\$1,644,453</u>
Depreciation Expense —Equipment	529,670	
Accumulated Depreciation —		
Equipment— Saskatchewan		529,670
Item 4:	4,212,360	
Item 6:	<u>25,000</u>	
Total	4,237,360	
X 25% X 50%		529,670

CUMULATIVE COVERAGE: (Continued)

Depreciation Expense —Office Equipment ..	123,883	
Accumulated Depreciation —		
Office Equipment—Ontario		123,883

Beginning Balance:

Cost	3,000,000	
Less Accumulated depreciation	<u>2,688,960</u>	
Carrying amount January 1, 2014	311,040	
Less book value of asset disposal	<u>(4,000)</u>	
Book value for depreciation	307,040	
X 40%		122,816

Additions during 2014 (Item 2)	1,333	
Addition during 2014 (Item 5)	<u>4,000</u>	
Depreciation on additions of	5,333	
X 40% X 50%		<u>1,067</u>
Total		<u>\$123,883</u>

Depreciation Expense —Office Equipment ..	50,000	
Accumulated Depreciation —		
Office Equipment— Saskatchewan .		50,000
(Item 1: \$250,000 X 40% X 50%)		

Depreciation Expense —Vehicles	33,864	
Accumulated Depreciation —		
Vehicles—Ontario		33,864

Beginning Balance:

Cost	500,000	
Less Accumulated depreciation	<u>315,680</u>	
Carrying amount January 1, 2014	184,320	
Disposal in 2014: Item 3		
Cost	25,000	
Less: Accumulated Depreciation	<u>10,000</u>	<u>(15,000)</u>
Balance for depreciation	169,320	
X 20%		<u>33,864</u>

CUMULATIVE COVERAGE: (Continued)

Amortization Expense—Development Costs	65,000
Accumulated Amortization—	
Development Costs	65,000
(Item 7: \$390,000 ÷ 3 X 50%)	

Item 8.

Amortization Expense—Customer List	25,000
Accumulated Amortization —	
Customer List.....	25,000
(\$250,000 ÷ 10 years)	

Impairment Loss—Customer List	66,500
Accumulated Impairment Loss—	
Customer List.....	66,500

Cost.....	250,000
Less accumulated amortization, Jan. 1, 2014	112,500
Less amortization 2014.....	<u>25,000</u>
Carrying amount Dec. 31, 2014	<u><u>112,500</u></u>

Undiscounted cash flows	50,000
Therefore the customer list is impaired.	

Fair value	46,000*
Impairment excess of carrying amount over fair value:	
Carrying amount	112,500
Fair value	<u>46,000</u>
Impairment.....	<u><u>66,500</u></u>

***The fair value amount is not provided. However, assuming the list has no market value, its value in use is a reasonable surrogate for fair value. In addition, \$46,000 is the present value of an annuity of \$25,000 ($n=2$, i =between 5% and 6%) – so this is not an unreasonable estimate of fair value.**

Recoverable value of goodwill in the amount of \$700,000 exceeds carrying amount of \$500,000 and so no entry is required.

CUMULATIVE COVERAGE: (Continued)

FIT FIXTURES INCORPORATED Balance Sheet (partial) December 31, 2014

Property, Plant and Equipment

Land		\$2,000,000
Buildings.....	\$12,375,000	
Less: Accumulated depreciation	<u>1,328,750</u>	11,046,250
Equipment.....	27,995,027	
Less: Accumulated depreciation	<u>19,353,145</u>	8,641,882
Office equipment.....	3,248,333	
Less: Accumulated depreciation	<u>2,859,843</u>	388,490
Vehicles	475,000	
Less: Accumulated depreciation	<u>339,544</u>	<u>135,456</u>
Total property, plant and equipment		\$22,212,078
Development costs (net).....		325,000
Customer list (net).....		46,000
Goodwill.....		500,000

CUMULATIVE COVERAGE: (Continued)

Details of balances:

	<u>Ontario</u>	<u>Saskatchewan</u>	<u>Total</u>
Assets cost			
Land	<u>1,500,000</u>	<u>500,000</u>	<u>2,000,000</u>
Building	10,875,000		
Item 1	<u>1,500,000</u>	<u>1,500,000</u>	<u>12,375,000</u>
	<u>10,875,000</u>	<u>1,500,000</u>	<u>12,375,000</u>
Equipment	23,756,000		
Item 2	1,667		
Item 4		4,212,360	
Item 6		25,000	
	<u>23,757,667</u>	<u>4,237,360</u>	<u>27,995,027</u>
Office Equipment	3,000,000		
Item 1		250,000	
Item 2	1,333		
Item 5 (net)	<u>(3,000)</u>		
	<u>2,998,333</u>	<u>250,000</u>	<u>3,248,333</u>
Vehicles	500,000		
Item 3	<u>(25,000)</u>		
	<u>475,000</u>		<u>475,000</u>
Customer			
List Opening	<u>250,000</u>		<u>250,000</u>
Development Costs			
Item 7	<u>390,000</u>		<u>390,000</u>

CUMULATIVE COVERAGE: (Continued)

Accumulated depreciation/amortization and impairment

Building Opening	1,057,500		
2014 entry	235,000	36,250	
	1,292,500	36,250	1,328,750
Equipment Opening	17,179,022		
2014 entry	1,644,453	529,670	
	18,823,475	529,670	19,353,145
Office Equipment Opening	2,688,960		
Item 5	(3,000)		
2014 entry	123,883	50,000	
	2,809,843	50,000	2,859,843
Vehicle Opening	315,680		
Item 3	(10,000)		
2014 entry	33,864		
	339,544		339,544
Customer List Opening	112,500		
2014 entry	25,000		
2014 entry-impairment	66,500		
	204,000		204,000
Development costs			
2014 entry	65,000		
	65,000		65,000

(b)

Avoidable interest —Item 1:

Borrowing costs incurred on the construction of the Saskatchewan building must be capitalized under IFRS, whereas private entity GAAP permits a choice of policy.

CUMULATIVE COVERAGE: (Continued)

Customer list – Item 8:

The process for determining the amount of the impairment loss would be different, although the same impairment loss would be calculated. If the assumption is that there is no market for the customer list or that its selling price is \$46,000 or less, its fair value less costs to sell would be \$0 or <\$46,000, respectively. With a value in use of \$46,000, the recoverable amount would be \$46,000, and the impairment loss would be identical to the amount calculated under ASPE.

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