

## CHAPTER ONE SOLUTIONS

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### Solution to Assignment Problem One - 1

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**Note To Instructor** If you are assigning this problem, note that only the first two answers can be found in Chapter 1 of the text.

The circumstances under which a general provision of the *Income Tax Act* can be overridden are as follows:

1. In those situations where there is a conflict between the provisions of an international tax treaty and the *Income Tax Act*, the terms of the international tax treaty will prevail.
2. While court decisions cannot be used to change the actual tax law, court decisions may call into question the reasonableness of interpretations of the ITA made by either the CRA or tax practitioners.
3. In some cases, a more specific provision of the *Act* will contain an exception to a general rule. For example, while ITA 18(1)(b) does not allow the deduction of capital expenditures in computing business income, ITA 20(1)(aa) contains a provision that allows the deduction of landscaping costs.

## Solution to Assignment Problem One - 2

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Some of the possible examples of conflicts between objectives would be as follows:

1. **Revenue Generation And International Competitiveness** The need to lower rates of taxation in order to be competitive on an international basis is in conflict with the need to generate revenues.
2. **Fairness And Simplicity** In order to make a tax system simple, a single or small number of tax rates must be applied to a well established concept of income with only a limited number of deductions or exceptions available. This is in conflict with the goal of tailoring the system to be fair to specific types of individuals, such as the disabled.
3. **Revenue Generation And Social Goals** The desire to provide funds to certain types of individuals (Old Age Security) or to provide certain types of services (health care) may be in conflict with the need to generate tax revenues.
4. **Flexibility And Certainty** To make a tax system flexible in changing economic, political, and social circumstances, there must be some uncertainty.

## Solution to Assignment Problem One - 3

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There is, of course, no one solution to this problem. Further, student answers will be limited as, at this point, their understanding of tax concepts and procedures is fairly limited. However, the problem should provide the basis of an interesting discussion. What we have provided here are some suggested comments related to the various qualitative characteristics.

**International Competitiveness** This is, perhaps, the most important reason for the tax rate reduction for corporations. At 35 percent, the U.S. corporate tax rate was higher than the corresponding rate in any other OECD country (e.g., the federal rate in Canada is 15 percent). If a country's tax system has rates that are out of line with those in comparable countries, the result will be an outflow of both business and skilled individuals to those countries that have more favourable tax rates.

**Adequacy** This is another important consideration. There is a belief in some circles that lowering tax rates on business will, because of the positive effect on economic activity, produce an increase in tax revenues. Evidence on the validity of this view is mixed. If this view is not valid, a reduction in corporate tax revenues will have to be accompanied by an increase in other types of taxes or, alternatively, a reduction in government expenses.

**Balance Between Sectors** Prior to the rate reduction, the U.S. had a high corporate tax rate, a relatively low maximum rate on individuals and no federal sales tax. If cutting the corporate tax rate results in either an increase in individual tax rates or the introduction of a federal sales tax, this would represent a significant change in the balance between corporations and individuals.

**Equity Or Fairness** If the reduction in corporate taxes results in increased taxes on individuals, some would argue that the change is not equitable or fair.

**Neutrality** The reduction in corporate taxes is not neutral in that it is likely to have a large impact on economic decisions. For example, it could result in some of the huge cash balances that U.S. companies are holding abroad being repatriated to the U.S.

**Elasticity** The reduction in corporate taxes wouldn't really alter the elasticity of the corporate tax system. Revenues would continue to move in a manner that is directly related to corporate profits.

**Flexibility** The reduction in corporate taxes would not alter flexibility of the corporate tax system. Before and after the reduction, tax rates can be changed by the relevant legislative body.

**Simplicity And Ease Of Compliance** Ease of compliance has little to do with the specific rate being charged. This characteristic is controlled by the rules related to the application of the rate.

**Certainty** There is uncertainty related to the reduction in corporate taxes in that the revenue outcome is uncertain. Proponents of the reduction expect an increase in revenue while opponents expect a decline in revenues.

## Solution to Assignment Problem One - 4

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While there is not one “correct” solution to this problem, the following solution contains comments on each of the listed qualitative characteristics.

**Equity Or Fairness** The toll is clearly regressive in nature in that it is assessed almost exclusively on lower income individuals. In general, regressive taxes are viewed as being less fair. While the toll has horizontal equity (individuals with the same Taxable Income would pay the same amounts), it lacks vertical equity (the higher income residents of the island would not normally be subject to the tolls).

**Neutrality** The concept of neutrality calls for a tax system that interferes as little as possible with decision making. The toll may influence employment decisions. If the non-residents have off-island employment opportunities, they may choose not to work on the island.

**Adequacy** While we do not have any information on this, it would be safe to assume that the toll was established at a level that would be adequate for the funding requirements related to the bridge.

**Elasticity** Tax revenues should be capable of being adjusted to meet changes in economic conditions, without necessitating tax rate changes. It is not clear from the problem whether economic conditions would influence the number of individuals who work on the island and pay the toll.

**Flexibility** This refers to the ease with which the tax system can be adjusted to meet changing economic or social conditions. The tolls can be easily adjusted and, thereby get high marks for this characteristic.

**Simplicity And Ease Of Compliance** A good tax system is easy to comply with and does not present significant administrative problems for the people enforcing the system. The toll would receive high marks in this regard.

**Certainty** Individual taxpayers should know how much tax they have to pay, the basis for payments, and the due date. There is no uncertainty associated with a clearly posted toll rate.

**Balance Between Sectors** A good tax system should not be overly reliant on either corporate or individual taxation. The toll is, of course, totally reliant on the taxation of individuals.

**International Competitiveness** If a country’s tax system has rates that are out of line with those in comparable countries, the result will be an outflow of both business and skilled individuals to those countries that have more favourable tax rates. Although international competitiveness would not appear to be an issue with the toll, it would affect the ability of the city to maintain and attract workers.

## Solution to Assignment Problem One - 5

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### ***Solution According To Textbook***

Mr. Valone would be considered a part year resident and would only be assessed for Canadian income taxes on worldwide income during the portion of the year prior to his ceasing to be a resident of Canada.

S5-F1-C1 indicates that, in general, the CRA will view an individual as becoming a non-resident on the latest of three dates:

- The date the individual leaves Canada.
- The date the individual's spouse or common-law partner and dependants leave Canada.
- The date the individual becomes a resident of another country.

While Mr. Valone departed from Canada on March 1, 2019, he will be considered a Canadian resident until his family's departure on June 20, 2019. The fact that his family remained in Canada would lead to this conclusion. While not essential to this conclusion, the fact that he did not sell his Canadian residence until that date would provide additional support.

His Canadian salary from January 1, 2019 to March 1, 2019 would be subject to Canadian taxes. In addition, his U.S. salary for the period March 1, 2019 through June 20, 2019 will be subject, first to U.S. taxes, and then subsequently to Canadian taxes. In calculating his Canadian taxes payable, he will receive a credit for the U.S. taxes which he has paid on this income. However, because Canadian tax rates at a given income level are usually higher than those which prevail in the U.S., it is likely that he will be required to pay some Canadian income taxes in addition to the U.S. taxes.

### ***Note To Instructors***

The preceding solution reflects the content of the text with respect to departures from Canada and students should be evaluated on that basis. However, S5-F1-C1 qualifies the general departure rules as follows:

**Paragraph 1.22** An exception to this will occur where the individual was resident in another country prior to entering Canada and is leaving to re-establish his or her residence in that country. In this case, the individual will generally become a non-resident on the date he or she leaves Canada, even if, for example, his or her spouse or common law partner remains temporarily behind in Canada to dispose of their dwelling place in Canada or so that their dependants may complete a school year already in progress.

On the assumption that Mr. Valone was a resident of the U.S. prior to his working years in Canada, this exception would mean that he would cease to be a resident of Canada on March 1, 2019, the date that he departs from Canada.

The textbook does not deal with the residency rules of countries other than Canada. Although this solution concludes that June 20 is the date residency is terminated in Canada, it is probable that the foreign jurisdiction (the U.S.) would consider Mr. Valone to be resident under their own rules effective March 1. In effect, the period between March 1 and June 20 would become a dual residency period. We would not expect students to come to this conclusion, but include this to illustrate the complexities of international issues in taxation.

## Solution to Assignment Problem One - 6

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**Note To Instructors** This problem is based on a Tax Court Of Canada case, Hamel Vs. The Queen (2012 DTC 1004). The actual year in question is 2007, with the judgment being rendered in 2011. We have moved the dates in the problem up by 8 years. It is our opinion that, since this judgment was rendered, there have been no legislative or other changes that would alter the conclusions reached by Tax Court judge in this case.

### **Background**

The minister assessed Mr. Hamel on the basis of his not giving up Canadian residency on January 13, 2007 (the original date in the case). Mr. Hamel appealed to the Tax Court of Canada which resulted in Hamel Vs. The Queen (2012 DTC 1004).

The solution that follows is the judge's analysis and decision in the case (note that it was translated from French). The judge's conclusion also contained a long section of references to other cases which we have not included in this solution. The original dates in the solution have been changed to correspond to the dates in the problem.

### **Judge's Analysis And Decision**

The respondent's main argument is that every person must have a residence. Presuming the appellant had not resided in Qatar, she found that he must necessarily have resided in Canada.

After arriving at this conclusion, she relied on the following facts:

- The appellant came to Canada a few times.
- The appellant had two bank accounts in Canada, which he used to make all his payments, in particular for his credit cards, which were also issued in Canada.
- The appellant had some money in an RRSP.
- The appellant had no postal address in Qatar.

As for the other elements, for example, not having a driver's licence, not having property such as furniture, clothing, accommodations or vehicles, and not having a health insurance card, the respondent claims that they have no impact one way or the other.

The evidence clearly showed that the appellant's decision came after a lengthy period of reflection. It also showed that the appellant did not have any deep roots and did not hesitate to leave when his son, who was ill, let him go with no regrets.

His relationship with his wife was so tense that they tolerated one another only because of their shared concern about their son who was ill.

The appellant had a very good position. He did not want to run away from his responsibilities. He gave all his property and agreed to pay generous support payments before leaving; he has always complied with these commitments. He did not apply for a new Canadian driver's licence when his was suspended, even though the evidence showed it was important for him to be able to use a car if he wanted an international driver's license or even a driver's licence from the country in which he was living.

He specifically gave up his health card in 2017.

Regarding the beginning of the relevant period of the appeal, the beginning of 2016 (the original year), it must be considered that a reasonable person would be careful. The appellant stated he could only get a work permit if a medical exam showed he was in good health, otherwise he had to return to his country of origin. The same can be said for the position, the duration of which generally depends on the employer, not the employee. In other words, there is, normally, a reasonable delay before a permanent break. This explains the time between the beginning of the period in question and the time the appellant gave up his health insurance.

As for the argument that the appellant never had a residence in Qatar, I do not believe it is cogent, because the appellant was employed and had a residence. The appellant's strong interest in staying in Qatar was shown by the intensive courses he took to get a driver's licence, when he could have traveled with coworkers, even though he had cancelled his Canadian driver's licence. When his employment ended in Qatar, the appellant returned to the country to see the people with whom he had worked and the work he had done.

In particular, in view of the following facts, I find that, on the preponderance of the evidence, the appellant's position must be accepted:

- The family context was special and conducive to a permanent departure.
- The appellant left after disposing of all his own property.
- The appellant waived his right to obtain a new driver's licence a few months before leaving Canada.
- The appellant returned to Canada a few times for very short stays that were for the purpose of visiting his two sons, his mother and friends.

After leaving Qatar upon the expiry of his work contract, the appellant returned to meet friends and business acquaintances, thereby showing he had been happy there.

The break came after a long period of thorough reflection.

The appellant has set out all the facts showing his intention to sever ties with this country permanently.

Although the relevance of prior facts is limited, they tend to confirm that the appellant severed his ties with Canada in mid-January 2016.

For these reasons, I conclude that the appellant ceased being a resident of Canada as of January 13, 2016. As a result, the appeal is allowed with costs in favour of the appellant.

## Solution to Assignment Problem One - 7

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### **Case A**

Residency terminates at the latest of:

- the date the individual leaves Canada;
- the date the individual's family leaves Canada; and
- the date that individual establishes residency elsewhere.

As Gary's family did not leave Canada until June 30, 2019, Gary would be considered a Canadian resident until that date. Provided he has no intention of returning to Canada, he would be a Canadian resident for the period January 1, 2019 through June 30, 2019. He would be subject to Part I tax on his world wide income during this period. He would not be subject to Part I tax on his rental income subject to that date.

**Note To Instructors** As will be discussed in Chapter 20, the tax on the rental income would not be subject to Part I tax. It would be Part XIII tax.

### **Case B**

As noted in S5-F1-C1, "Determining an Individual's Residence Status", commuting from the U.S. for employment purposes does not make an individual a deemed resident under the sojourner rules. Therefore, Sarah would not be considered a Canadian resident for income tax purposes.

Sarah would be subject to Canadian tax on her 2019 Canadian employment income. She would not be subject to Canadian tax on her U.S. savings account interest.

### **Case C**

Byron's cruise would be considered a temporary absence from Canada. Given the facts, it appears his intent is not to permanently sever residential ties with Canada. This position is evidenced by the fact his cruise is for a limited time and he will not be establishing residency in another country.

Byron's departure does not appear to be a true departure in that he has only taken a leave of absence from his job. In addition, he has retained some residential ties.

Given these facts, Byron will remain a Canadian resident during his cruise and would be subject to Canadian tax on his worldwide income during all of 2019.

### **Case D**

As she is exempt from taxation in Germany because she is the spouse of a deemed Canadian resident, Hilda would be a deemed resident of Canada for income tax purposes during 2019 [(ITA 250(1)(g)].

Hilda would be subject to Canadian tax on her worldwide income during 2019.

### **Case E**

Because she has an employment contract that requires her to return to Canada in 2022, she will be viewed as having retained Canadian residence status. Although she has severed her ties with Canada, the requirement to return would show that she does not intend to permanently leave Canada.

Jessica will be subject to Canadian tax on her worldwide income during 2019.

## Solution to Assignment Problem One - 8

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### **Canada/U.S. Tax Treaty Tie Breaker Rule**

In cases of dual residency for corporations, where a corporation could be considered a resident of both countries, the Canada/U.S. tax treaty indicates that the corporation will be deemed to be a resident only in the country in which it is incorporated.

#### **Case A**

The mind and management of the Allor Company are in Canada and this suggests that the Company is a resident of Canada. However, as the Allor Company was incorporated in the U.S., it is also a resident of that country. Using the tie breaker rule, the Allor Company will be considered a resident of the U.S. and a non-resident of Canada.

#### **Case B**

Kodar Ltd. was incorporated in Canada after April 26, 1965. This means that, under ITA 250(4)(a), Kodar Ltd. is a deemed resident of Canada. Because the mind and management of the Company are in the United States, it is also considered a resident of the U.S. Using the tie breaker rule, Kodar Ltd. will be considered a resident of Canada as it was incorporated in Canada.

#### **Case C**

The Karlos Company was not incorporated in Canada and its mind and management are not currently located in Canada. Therefore, Karlos would not be considered a resident of Canada.

#### **Case D**

While Bradlee Inc. is not operating in Canada, it was incorporated here prior to April 27, 1965. If it had not carried on business in Canada after that date, it would not be a Canadian resident. However, it did carry on business in Canada after that date and, as a consequence, it is a deemed resident under ITA 250(4)(c).

As the mind and management of the Company are currently in the United States, the Company is also a resident of that country. Under the tie breaker rule, Bradlee Inc. would be a resident of Canada as it was incorporated in Canada.

## Solution to Assignment Problem One - 9

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### **Part A**

Brian Palm would be considered a part year resident of Canada until July 31, 2019, the date of his departure and would be taxed on his worldwide income for this period. As his presence in Canada during the first part of the year was on a full time basis, he would not fall under the sojourning rules.

### **Part B**

Rachel is a deemed resident of Canada under ITA 250(1)(b). As Gunter is exempt from German taxation because he is related to Rachel, he is also considered a deemed resident of Canada under ITA 250(1)(g).

### **Part C**

As she is present in Canada on a temporary basis for more than 183 days per year, she would be considered a sojourner. Under ITA 250(1)(a), this would make her a Canadian resident for income tax purposes for all of 2019.

### **Part D**

Martha would be a Canadian resident for income tax purposes during 2019. An individual is not considered to have departed from Canada until the latest of the departure date, the date of departure for their spouse and children, and the date on which residence is established in a different country. As her family is staying in Canada and Martha will not be establishing residency in another country, she will remain a Canadian resident during her trip. The fact that she is a U.S. citizen is irrelevant to her residency status.

### **Part E**

ITA 250(4)(c) indicates that a corporation is resident in Canada if it was incorporated in Canada prior to April 27, 1965 and carried on business, or was resident in Canada, in any year ending after April 26, 1965. However, as the mind and the management of the company is in the U.S., it is also a resident of that country. In cases of dual residency for corporations, where a corporation could be considered a resident of both countries, the Canada/U.S. tax treaty indicates that the corporation will be deemed to be a resident only in the country in which it is incorporated. Given this, Bronson Inc. would be a resident of Canada.

### **Part F**

The company was not incorporated in Canada and the mind and management of the company is not in Canada. Ubex Ltd. is not a resident of Canada.

## Solution to Assignment Problem One - 10

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In cases of dual residency, the Canada/U.S. tax treaty has tie breaker rules. Under these rules residence would be determined by applying criteria in the following order:

- **Permanent Home** If the individual has a permanent home available in only one country, the individual will be considered a resident of that country. A permanent home means a dwelling, rented or purchased, that is continuously available at all times. For this purpose, a home that would only be used for a short duration would not be considered a permanent home.
- **Centre of Vital Interests** If the individual has permanent homes in both countries, or in neither, then this test looks to the country in which the individual's personal and economic relations are greatest. Such relations are virtually identical to the ties that are examined when determining factual residence for individuals.
- **Habitual Abode** If the first two tests do not yield a determination, then the country where the individual spends more time will be considered the country of residence.
- **Citizenship** If the tie-breaker rules still fail to resolve the issue, then the individual will be considered a resident of the country where the individual is a citizen.
- **Competent Authority** If none of the preceding tests resolve the question of residency then, as a last resort, the so-called "competent authority procedures" are used. Without describing them in detail, these procedures are aimed at opening a dialogue between the two countries for the purpose of resolving the conflict.

### **Case A**

As Ty was in Canada for more than 183 days, he is a deemed resident through the application of the sojourner rule. This means that he is likely to be considered a resident in both the United States and Canada. In such situations, the tie breaker rules would be applicable

It does not appear that Ty has a permanent home, a centre of vital interests, or a habitual abode. Therefore, it would appear that the fact that Ty is a citizen of the U.S. would be the determining factor. This treaty result would override the sojourner rule, making Ty a non-resident of Canada.

### **Case B**

As he is in Canada for more than 183 days, Jordan would be a deemed Canadian resident under the sojourner rules. As in Case A, it is likely that he would be considered a resident in both countries. Given this the tie breaker rules would be applicable. As Jordan appears to have a permanent home in Kalispell, these rules would make him a resident of the United States. This treaty result would override the sojourner rule, making Jordan a non-resident of Canada.

## Solution to Assignment Problem One - 11

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### ***Accountant's View***

The accountant's definition uses historical cost accounting following GAAP. Under GAAP, revenue is generally recognized when goods are sold or services delivered. Expenses are then matched against these revenues, with the resulting difference referred to as accounting Net Income.

### ***Economist's View***

The economist's definition of income includes all gains, whether realized or unrealized, as increases in net economic power.

### ***Income Tax Act View***

Conceptually, the ITA view is very similar to the accountant's view. However, there are many differences which result from the application of complex rules in the ITA. For example, a portion of capital gains is not considered to be Taxable Income under the ITA view. In contrast, both accountants and economists would include 100 percent of such gains in income. Note, however, the timing would be different as economists would tend to recognize such gains prior to the realization. Accountants generally do not recognize capital gains until they are realized through a disposition of the relevant asset.

## Solution to Assignment Problem One - 12

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### Case One

The Case One solution would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income		\$62,350
Income Under ITA 3(b):		
Taxable Capital Gains		
[(1/2)(\$97,650)]	\$48,825	
Allowable Capital Losses		
[(1/2)(\$5,430)]	( 2,715)	46,110
Balance From ITA 3(a) And (b)		\$108,460
Subdivision e Deduction:		
Deductible RRSP Contribution		( 4,560)
Balance From ITA 3(c)		\$103,900
Deduction Under ITA 3(d):		
Net Business Loss		( 115,600)
Net Income For Tax Purposes (Division B Income)		Nil

In this Case, Karla has an unused business loss carry over of \$11,700 (\$103,900 - \$115,600).

### Case Two

The Case Two solution would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income	\$45,600	
Net Business Income	<u>27,310</u>	\$72,910
Income Under ITA 3(b):		
Taxable Capital Gains		
[(1/2)(\$31,620)]	\$15,810	
Allowable Capital Losses		
[(1/2)(\$41,650)]	( 20,825)	Nil
Balance From ITA 3(a) And (b)		\$72,910
Subdivision e Deduction:		
Spousal Support Payments [(12)(\$600)]		( 7,200)
Balance From ITA 3(c)		\$65,710
Deduction Under ITA 3(d):		
Net Rental Loss		( 4,600)
Net Income For Tax Purposes (Division B Income)		\$61,110

In this Case, Karla has an unused allowable capital loss carry over of \$5,015 (\$20,825 - \$15,810). As Karla's gambling activity does not appear to be substantial enough to be considered a business, the \$46,000 in winnings would not be taxable.

## Solution to Assignment Problem One - 13

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### Case A

The Case A solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income	\$58,200	
Rental Income	<u>5,400</u>	\$63,600
Income Under ITA 3(b):		
Taxable Capital Gains	\$31,600	
Allowable Capital Losses	<u>( 12,400)</u>	19,200
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Balance From ITA 3(a) And (b)		\$82,800
Subdivision e Deductions		<u>( 4,100)</u>
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Balance From ITA 3(c)		\$78,700
Deduction Under ITA 3(d):		
Business Loss		<u>( 12,300)</u>
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Net Income For Tax Purposes (Division B Income)		<u>\$66,400</u>

In this Case, Mr. Denham has no loss carry overs at the end of the year.

### Case B

The Case B solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income	\$82,600	
Rental Income	<u>12,200</u>	\$94,800
Income Under ITA 3(b):		
Taxable Capital Gains	\$15,600	
Allowable Capital Losses	<u>( 23,400)</u>	Nil
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Balance From ITA 3(a) And (b)		\$94,800
Subdivision e Deductions		<u>( 5,400)</u>
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Balance From ITA 3(c)		\$89,400
Deduction Under ITA 3(d):		
Business Loss		<u>( 8,400)</u>
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Net Income For Tax Purposes (Division B Income)		<u>\$81,000</u>

In this Case, Mr. Denham has an allowable capital loss carry over of \$7,800 (\$15,600 - \$23,400).

**Case C**

The Case C solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income	\$46,700	
Rental Income	<u>2,600</u>	\$49,300
Income Under ITA 3(b):		
Taxable Capital Gains	\$11,600	
Allowable Capital Losses	<u>( 10,700)</u>	900
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Balance From ITA 3(a) and (b)		\$50,200
Subdivision e Deductions		<u>( 11,600)</u>
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Balance From ITA 3(c)		\$38,600
Deduction Under ITA 3(d):		
Business Loss		<u>( 62,300)</u>
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Net Income For Tax Purposes (Division B Income)		<u>Nil</u>

In this Case, Mr. Denham would have a business loss carry over in the amount of \$23,700 (\$38,600 - \$62,300).

**Case D**

The Case D solution would be calculated as follows:

Income Under ITA 3(a):		
Employment Income		\$33,400
Income Under ITA 3(b):		
Taxable Capital Gains	\$23,100	
Allowable Capital Losses	<u>( 24,700)</u>	Nil
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Balance From ITA 3(a) And (b)		\$33,400
Subdivision e Deductions		<u>( 5,600)</u>
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Balance From ITA 3(c)		\$27,800
Deduction Under ITA 3(d):		
Business Loss		<u>( 46,200)</u>
Rental Loss		<u>( 18,300)</u>
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Net Income For Tax Purposes (Division B Income)		<u>Nil</u>

Mr. Denham would have a carry over business and rental losses in the amount of \$36,700 (\$27,800 - \$46,200 - \$18,300) and of allowable capital losses in the amount of \$1,600 (\$23,100 - \$24,700).

## CHAPTER TWO SOLUTIONS

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### Solution to Assignment Problem Two - 1

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While there are alternatives in all Cases, the following answers represent the “minimum” instalments, as required in the problem.

#### **Part A - Case One**

Ms. Nite's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2017 &= \$4,400 (\$18,880 - \$14,480) \\ 2018 &= \$600 (\$20,320 - \$19,720) \\ 2019 &= \$3,120 (\$21,760 - \$18,640) \text{ Estimated} \end{aligned}$$

As her net tax owing is expected to exceed \$3,000 in 2019 and was more than \$3,000 in 2017, the payment of instalments is required.

If the CRA's instalment reminder approach was used, the first two instalments total \$2,200  $[(2)(\$4,400 \div 4)]$ . As this \$2,200 exceeds the total for 2018, the remaining two instalments would be nil.

The best alternative would be to base the instalments on 2018 net tax owing. This would result in quarterly instalments of \$150  $(\$600 \div 4)$ , for a total of \$600. This is significantly lower than the \$2,200 required in the first two instalments under the CRA approach.

#### **Part A - Case Two**

Ms. Nite's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2017 &= \text{Nil} (\$18,880 - \$19,280) \\ 2018 &= \$5,440 (\$20,320 - \$14,880) \\ 2019 &= \$3,200 (\$21,760 - \$18,560) \text{ Estimated} \end{aligned}$$

As her net tax owing is expected to exceed \$3,000 in 2019 and was more than \$3,000 in 2018, the payment of instalments is required.

If the CRA's instalment reminder approach was used, the first two instalments would be nil. However, the remaining two instalments would be \$2,720 each  $[(\$5,440 - \text{Nil}) \div 2]$ , for a total of \$5,440.

The best alternative would be to base the instalments on 2019 net tax owing. This would result in quarterly instalments of \$800  $(\$3,200 \div 4)$ , for a total of \$3,200. This is significantly less than the \$5,440 total required under the CRA approach.

#### **Part A - Case Three**

Ms. Nite's net tax owing in each of the three years is as follows:

$$\begin{aligned} 2017 &= \$3,600 (\$18,880 - \$15,280) \\ 2018 &= \$4,160 (\$20,320 - \$16,160) \\ 2019 &= \$2,320 (\$21,760 - \$19,440) \text{ Estimated} \end{aligned}$$

As her net tax owing is not expected to exceed \$3,000 in 2019, the payment of instalments is not required. However, if the 2019 net tax owing turned out to exceed \$3,000, then instalments would have been required. She may be charged interest on the insufficient instalments if the interest totals more than \$25.

#### **Part B**

In Case One and Case Two, the required instalments would be due on March 15, 2019, June 15, 2019, September 15, 2019 and December 15, 2019.

## Solution to Assignment Problem Two - 2

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### Part A

Under ITA 157(1), Ledux Inc. would have three alternatives with respect to the calculation of its instalment payments. The alternatives and the relevant calculations are as follows:

**Current Year Base** The instalment payments could be 1/12th of the estimated Tax Payable for the current year. In this case the resulting instalments would be \$16,945.42 per month ( $\$203,345 \div 12$ ).

**Preceding Year Base** The instalment payments could be 1/12th of the Tax Payable in the immediately preceding taxation year. The resulting instalments would be \$17,963.92 ( $\$215,567 \div 12$ ).

**Preceding And Second Preceding Years** The third alternative would be to base the first two instalments on 1/12th of the Tax Payable in the second preceding year and the remaining instalments on 1/10th of the Tax Payable in the preceding year, less the total amount paid in the first two instalments.

In this case, the first two instalments would be \$16,118.33 ( $\$193,420 \div 12$ ) each, a total of \$32,236.66. The remaining 10 instalments would be \$18,333.03 [ $(\$215,567 - \$32,236.66) \div 10$ ] each. The total instalments under this approach would be \$215,567.

While the third approach would provide the lowest payments for the first two instalments, the payments would total \$215,567. As this is larger than the \$203,345 total when the instalments are based on the current year's estimated Tax Payable, the use of the current year's Tax Payable approach would be the best alternative.

### Part B

If the Company failed to make instalment payments towards the 2019 taxes payable, it would be liable for interest from the date each instalment should have been paid to the balance due date, March 31, 2019.

Assuming the actual 2019 taxes payable are \$203,345, it would be the least of the amounts described in ITA 157(1), and interest would be calculated based on the current year instalment alternative. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular base rate plus 4 percentage points.

There is a penalty on large amounts of late or deficient instalments. This penalty is specified in ITA 163.1 and is equal to 50 percent of the amount by which the interest owing on the late or deficient instalments exceeds the greater of \$1,000 and 25 percent of the interest that would be owing if no instalments were made. While detailed calculations are not required, we would note that this penalty would clearly be applicable in this case.

Interest on the entire balance of \$203,345 of taxes payable would be charged beginning on the balance due date, March 31, 2019, two months after the end of the 2019 taxation year. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular base rate plus 4 percentage points.

There is also a penalty for late filing. If no return is filed by the filing due date of July 31, 2019, the penalty amounts to 5 percent of the tax that was unpaid at the filing date, plus 1 percent per complete month of the unpaid tax for a maximum period of 12 months. This penalty is in addition to any interest charged due to late payment of instalments or balance due. In addition, interest would also be charged on any penalties until such time as the return is filed or the instalments (balance due) paid.

The late file penalty could be doubled to 10 percent, plus 2 percent per month for a maximum of 20 months for a second offence within a three year period.

## Solution to Assignment Problem Two - 3

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### Case 1

Bronson's net tax owing in each of the three years is as follows:

- 2017** = Nil (\$7,843 - \$8,946) Note that a negative number is not used here.  
**2018** = \$3,190 (\$12,862 - \$9,672)  
**2019** = \$3,851 (\$14,327 - \$10,476 Estimated)

As his net tax owing is expected to exceed \$3,000 in 2019 and was more than \$3,000 in 2018, the payment of instalments is required.

Instalments under the three acceptable alternatives would be as follows:

- Alternative 1** Using the estimated net tax owing for the current year would result in quarterly instalments of \$962.75 ( $\$3,851 \div 4$ ), for a total amount of \$3,851.  
**Alternative 2** Using the net tax owing for the previous year would result in quarterly instalments of \$797.50 ( $\$3,190 \div 4$ ), for a total amount of \$3,190.  
**Alternative 3** Using the net tax owing for the second previous year would result in the first two instalments being nil. The remaining two instalments would be \$1,595 [ $(\$3,190 - 0) \div 2$ ], a total of \$3,190.

The best alternative would be Alternative 3. While the total instalments under this alternative are the same as under Alternative 2, this option offers some deferral as the first two instalments are nil.

The required instalments would be due on September 15 and December 15, 2019.

### Case 2

Bronson's net tax owing in each of the three years is as follows:

- 2017** = Nil (\$8,116 - \$8,946) Note that a negative number is not used here.  
**2018** = \$4,174 (\$13,846 - \$9,672)  
**2019** = \$3,066 (\$13,542 - \$10,476) Estimated

As his net tax owing is expected to exceed \$3,000 in 2019 and was more than \$3,000 in 2018, the payment of instalments is required.

Instalments under the three acceptable alternatives would be as follows:

- Alternative 1** Using the estimated net tax owing for the current year would result in quarterly instalments of \$766.50 ( $\$3,066 \div 4$ ), for a total amount of \$3,066.  
**Alternative 2** Using the net tax owing for the previous year would result in quarterly instalments of \$1,043.50 ( $\$4,174 \div 4$ ), for a total amount of \$4,174.  
**Alternative 3** Using the net tax owing for the second previous year would result in the first two instalments being nil. The remaining two instalments would be \$2,087 [ $(\$4,174 - 0) \div 2$ ], a total of \$4,174.

The best choice would be Alternative 1. While the first two instalments are lower under Alternative 3, the total for the year under Alternative 3 is \$1,108 ( $\$4,174 - \$3,066$ ) higher.

The required instalments would be due on March 15, June 15, September 15, and December 15, 2019.

**Case 3**

Bronson's net tax owing in each of the three years is as follows:

$$2017 = \$4,200 (\$13,146 - \$8,946)$$

$$2018 = \$3,170 (\$12,842 - \$9,672)$$

$$2019 = \$3,200 (\$13,676 - \$10,476) \text{ Estimated}$$

As his net tax owing is expected to exceed \$3,000 in 2019 and was more than \$3,000 in both 2017 and 2018, the payment of instalments is required.

Instalments under the three acceptable alternatives would be as follows:

**Alternative 1** Using the estimated net tax owing for the current year would result in quarterly instalments of \$800 ( $\$3,200 \div 4$ ), for a total amount of \$3,200.

**Alternative 2** Using the net tax owing for the previous year would result in quarterly instalments of \$792.50 ( $\$3,170 \div 4$ ), for a total amount of \$3,170.

**Alternative 3** Using the net tax owing for the second previous year would result in the first two instalments being \$1,050 ( $\$4,200 \div 4$ ) each, a total of \$2,100. The remaining two instalments would be \$535 [ $(\$3,170 - \$2,100) \div 2$ ], a total of \$1,070. When combined with the first two instalments, the total for the year would be \$3,170 ( $\$2,100 + \$1,070$ ).

In terms of minimizing instalments, the best choice is Alternative 2. While the total amount is \$3,170, the same amount as under Alternative 3, there is some deferral with the first two payments being smaller.

The required instalments would be due on March 15, June 15, September 15, and December 15, 2019.

## Solution to Assignment Problem Two - 4

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### Part A

Under ITA 157(1), Lanterna Inc. would have three alternatives with respect to the calculation of its instalment payments. The alternatives and the relevant calculations are as follows:

**Current Year Base** The instalment payments could be 1/12th of the estimated Tax Payable for the current year. In this case the resulting instalments would be \$11,621.67 per month ( $\$139,460 \div 12$ ).

**Preceding Year Base** The instalment payments could be 1/12th of the Tax Payable in the immediately preceding taxation year. The resulting instalments would be \$11,810 ( $\$141,720 \div 12$ ).

**Preceding And Second Preceding Years** The third alternative would be to base the first two instalments on 1/12th of the Tax Payable in the second preceding year and the remaining instalments on 1/10th of the Tax Payable in the preceding year, less the total amount paid in the first two instalments.

In this case, the first two instalments would be \$11,054.17 ( $\$132,650 \div 12$ ) each, a total of \$22,108.34. The remaining 10 instalments would be \$11,961.17 [ $(\$141,720 - \$22,108.34) \div 10$ ] each. The total instalments under this approach would be \$141,720.

While the third approach would provide the lowest payments for the first two instalments, the payments would total \$141,720. As this is larger than the \$139,460 total when the instalments are based on the current year's Tax Payable, the use of the current year's Tax Payable approach would be the best alternative.

### Part B

If the Company failed to make instalment payments towards the 2019 taxes payable, it would be liable for interest from the date each instalment should have been paid to the balance due date, September 30, 2019.

Assuming the actual 2019 taxes payable are \$139,460, it would be the least of the amounts described in ITA 157(1), and interest would be calculated based on this instalment alternative. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular rate plus 4 percentage points.

There is a penalty on large amounts of late or deficient instalments. This penalty is specified in ITA 163.1 and is equal to 50 percent of the amount by which the interest owing on the late or deficient instalments exceeds the greater of \$1,000 and 25 percent of the interest that would be owing if no instalments were made. While detailed calculations are not required, we would note that this penalty would clearly be applicable in this case.

Interest on the entire balance of \$139,460 of taxes payable would be charged beginning on the balance due date, September 30, 2019. The rate charged would be the one prescribed in ITR 4301 for amounts owed to the Minister, the regular rate plus 4 percentage points.

There is also a penalty for late filing. If no return is filed by the filing date, the penalty amounts to 5 percent of the tax that was unpaid at the filing date, plus 1 percent per complete month of the unpaid tax for a maximum period of 12 months. This penalty is in addition to any interest charged due to late payment of instalments or balance due. In addition, interest would also be charged on any penalties until such time as the return is filed or the instalments (balance due) paid.

The late file penalty could be doubled to 10 percent, plus 2 percent per month for a maximum of 20 months for a second offence within a three year period.

## Solution to Assignment Problem Two - 5

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### **Part A**

For individuals, the taxation year is always the calendar year. Individuals without business income are required to file their tax returns no later than April 30 of the year following the relevant taxation year. For individuals with business income, and their spouse or common-law partner, the filing deadline is extended to June 15.

### **Part B**

The general rules are the same for both deceased and living individuals. That is, the return must be filed no later than April 30 of the year following the year of death. If the deceased individual, or his spouse or common-law partner had business income, the due date is June 15 of the year following the year of death.

However, when death occurs between November 1 of a taxation year and the normal filing date for that year's return, representatives of the deceased can file the return on the later of the normal filing due date (April 30th or June 15th of the following year) and six months after the date of death.

### **Part C**

Inter vivos trusts must use the calendar year as their taxation year. As the required tax return must be filed within 90 days of the taxation year end, returns for inter vivos trusts will be due March 31 (March 30 in leap years).

The rules are the same for most testamentary trusts. However, the exception to this is a testamentary trust that has been designated a graduated rate estate (GRE). Such GREs can use a non-calendar fiscal year for up to three years subsequent to the death of the settlor. GRE returns are due 90 days after the date that has been selected as the taxation year end.

### **Part D**

Corporations can use a non-calendar fiscal year as their taxation year. The corporate T2 return must be filed within six months of the end of the taxation year.

## Solution to Assignment Problem Two - 6

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The following additional information would be relevant in considering Mr. O'Brien's situation:

- A. Determination of the date of the Notice of Reassessment. A notice of objection must be filed prior to the later of:
- 90 days from the date of the Notice of Reassessment; and
  - one year from the due date for the return under reassessment.

In this case, the later date is clearly 90 days after the date of the Notice of Reassessment.

- B. Determination of the date of the Notice of Assessment for the 2015 taxation year. A three year time limit applies from the date of the Notice of Assessment. If he filed his 2015 return on April 30, 2016, the Notice of Reassessment would be within the three year time limit applicable to such reassessments if the reassessment is dated before May 1, 2019.
- C. Determination of whether Mr. O'Brien has signed a waiver of the three year time limit or if he is guilty of misrepresentation attributable to neglect, carelessness, or fraud. If the reassessment is not within the three year time limit, Mr. O'Brien would not usually be subject to reassessment. However, if Mr. O'Brien has signed a waiver of the three year time limit, or if he is guilty of misrepresentation attributable to neglect, carelessness, or fraud, he becomes subject to reassessment, regardless of the time period involved.

If the preceding determinations indicate that the reassessment is valid and you decide to accept Mr. O'Brien as a client, the following steps should be taken:

- You should have Mr. O'Brien file a Consent Form, T1013, with the CRA which authorizes you to represent him in his affairs with the CRA and/or authorize you to access his file through the online Represent a Client service.
- A notice of objection should be filed before the expiration of the 90 day time limit.
- You should begin discussions of the matter with the relevant assessor at the CRA.

## Solution to Assignment Problem Two - 7

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**Note To Instructor** These Cases have been based on examples found in IC 01-1.

### **Case 1**

While the use of the other accountant's business income statements resulted in the tax return that was filed, the tax return preparer would be entitled to the good faith defense since he relied, in good faith, on information provided by another professional on behalf of the client. Therefore, he would not be subject to the preparer penalty.

The third party penalties may be applied to the other accountant if he knew or would be expected to know, but for circumstances amounting to culpable conduct, that the financial statements contained false statements.

### **Case 2**

Since the tax return preparer e-filed the taxpayer's return without viewing the charitable donation receipt, the CRA would consider assessing the tax return preparer with the preparer penalty. Given that the size of the donation is so disproportionate to the taxpayer's apparent resources as to defy credibility, to proceed unquestioningly in this situation would show wilful blindness and thus an indifference as to whether the ITA is complied with.

### **Case 3**

In view of the business that the taxpayer is in, there was nothing in the income statement that would have made the accountant question the validity of the information provided to him. Therefore, he could rely on the good faith reliance exception and would not be subject to the preparer penalty.

### **Case 4**

The accountant would not be subject to the penalties for participating or acquiescing in the understatement of a tax liability. The facts were highly suspect until the accountant asked questions to clear up the doubt in his mind that the client was not presenting him with implausible information. The response addressed the concern and was not inconsistent with the knowledge he possessed.

### **Case 5**

The prospectus prepared by the company contains a false statement (overstated fair market value of the software) that could be used for tax purposes. The company knew or would reasonably be expected to know, but for culpable conduct, that the fair market value of the software was a false statement. The CRA would consider assessing the company and the appraiser with third party civil penalties.

### **Case 6**

The issue here is whether the accountant is expected to know that HST is not payable on wages, interest expense, and zero-rated purchases. It is clear that the accountant should have known that no HST could be claimed on these items. Given this, in filing a claim that includes an HST refund on the preceding items, the accountant made a false statement, either knowingly, or in circumstances amounting to culpable conduct. Consequently, the CRA would consider assessing the accountant with the third party civil penalty, specifically, the preparer penalty.

## CHAPTER THREE SOLUTIONS

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### Solution to Assignment Problem Three - 1

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***Cheeco Marques***

As the bonus is not paid within 3 years of the end of the year in which the services were rendered, this is a salary deferral arrangement. The company will deduct the bonus in the taxation year ending November 30, 2019. As it was earned in 2019, Cheeco will have to include the bonus in the calendar year ending December 31, 2019.

***Zeppo Marques***

In this case, the bonus is paid within 180 days of the company's November 30, 2019 year end. Given this, the company will be able to deduct the bonus in that year. However, Zeppo will not have to include it in income until the calendar year ending December 31, 2020.

***Groucho Marques***

The company will deduct the bonus in the year ending November 30, 2019. Groucho will include it in income in the calendar year ending December 31, 2019.

***Harpo Marques***

In this case, the bonus is not paid within 180 days of the company's November 30, 2019 year end. This means that the company will not be able to deduct the bonus until the taxation year ending November 30, 2020. Harpo will include the bonus in income in the calendar year ending December 31, 2020.

## Solution to Assignment Problem Three - 2

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### **Background**

The facts in this case reflect a Tax Court Of Canada case that was decided in June, 2010 (Vipan Bansal vs. Minister Of National Revenue).

At issue was whether the appellant worked as an employee or as an independent contractor during the period from January 1, 2008 to October 21, 2008 for the purposes of the Canada Pension Plan and the Employment Insurance Act. The appellant argued that he was an employee of the payor whereas the Minister determined that he was not.

We have changed the name of the appellant and updated the dates in order to avoid having students locate the actual case if this is used as an assignment problem.

### **Intent**

The most important factor in the employer/independent contractor decision is the intent of both parties. The court noted that, as there was a disagreement between the parties as to intent, it becomes necessary to look at all of the facts to determine the legal relationship that they reflect.

### **Factors Suggesting Independent Contractor Status**

**Tools** The Appellant provided his own car.

#### **Risk Of Loss**

- The Appellant had liability exposing him to a risk of loss.
- The Appellant incurred vehicle expenses, including insurance, maintenance and fuel.
- The Appellant incurred operating expenses such as liability insurance and a driver training endorsement.
- The Appellant paid for the installation and removal of the emergency brake provided by the Payor.

**Chance Of Profit** The more hours (over 20) the Appellant worked the greater were his chances of profit. Although not stated in the problem, this was not the case for the driving instructors having employee status since they were limited in the number of hours they could work.

#### **Control**

- The Appellant did not have a set schedule of hours or days of work.
- The Appellant could choose the routes for the lessons.
- The Appellant could work for anyone else (except as a driving instructor).

**Behaviour As An Entrepreneur** He behaved like an independent contractor in that he invoiced the Payor, charged the Payor GST, maintained his own books and records, and reported business income and business expenses on his 2017, 2018 and 2019 income tax returns.

### **Factors Suggesting Employee Status**

**Tools** The Payor provided vehicle signage, mirrors, traffic cones and an emergency brake.

#### **Control**

- The Payor provided the Appellant with a guide and the Appellant had to comply with all the instructions therein regarding the method of teaching.
- Although the Appellant could hire an assistant, he could not have someone replace him.

The conclusion of the Tax Court Of Canada was as follows:

Here we have an Appellant who, if I accept his testimony, was an employee (even though he behaved for a number of years like an independent contractor), and yet he performed his services in his own vehicle, paid for the installation and removal of the emergency brake provided by the Payor, incurred operating expenses, including vehicle expenses (insurance, maintenance and fuel), paid for liability insurance and a driver training endorsement, effectively had exposure to all kinds of liability, did not have a set schedule of hours or days of work and could, in a way, set his own deadlines and priorities.

I cannot find in these circumstances that the existence of some degree of control by the Payor over the Appellant outweighs the overall view that the Appellant was in business on his own account (e.g., an independent contractor).

## Solution to Assignment Problem Three - 3

### Part A - Jerry Chooses The Lexus ES

If Jerry chooses the Lexus ES and selects Option 1, the taxable benefit will be calculated as follows:

Standby Charge [(2%)(12)(\$45,000)]	\$10,800
Operating Cost Benefit (Jerry Pays His Own Costs)	Nil
Total Taxable Benefit	\$10,800
Number Of Years	2
Total Taxable Benefit - Option 1	\$21,600

Given this, the after tax cash flow associated with Option 1 would be calculated as follows:

Signing Bonus		\$55,000
Tax Consequences:		
Signing Bonus	(\$55,000)	
Taxable Benefit	( 21,600)	
Increase In Taxable Income	(\$76,600)	
Jerry' Marginal Tax Rate	48%	( 36,768)
Net Cash Inflow (Outflow)		\$18,232

Alternatively, the after tax cash flow associated with Option 2 would be as follows:

Signing Bonus		\$100,000
Purchase Price Of Vehicle		( 45,000)
Tax Consequences:		
Signing Bonus	(\$100,000)	
Jerry' Marginal Tax Rate	48%	( 48,000)
Trade In Proceeds		20,000
Net Cash Inflow (Outflow)		\$27,000

With respect to the Lexus ES alternative, selecting Option 2, is the better alternative. Note that, as Jerry pays his own operating expenses in both Option 1 and Option 2, this factor can be ignored in our calculations.

### Part B - Jerry Chooses the Lexus LS

If Jerry chooses the Lexus LS and selects Option 1, the taxable benefit will be calculated as follows:

Standby Charge [(2%)(12)(\$100,000)]	\$24,000
Operating Cost Benefit (Jerry Pays His Own Costs)	Nil
Total Taxable Benefit	\$24,000
Number Of Years	2
Total Taxable Benefit - Option 1	\$48,000

Given this, the after tax cash flow associated with Option 1 would be calculated as follows:

Signing Bonus		Nil
Tax Consequences:		
Taxable Benefit	(\$48,000)	
Signing Bonus	Nil	
Increase In Taxable Income	( 48,000)	
Jerry' Marginal Tax Rate	48%	(23,040)
Net Cash Inflow (Outflow)		(\$23,040)

Alternatively, the after tax cash flow associated with Option 2 would be as follows:

Signing Bonus		\$100,000
Purchase Price Of Vehicle		( 100,000)
Tax Consequences:		
Signing Bonus	(\$100,000)	
Jerry' Marginal Tax Rate	<u>48%</u>	( 48,000)
Trade In Proceeds		<u>40,000</u>
Net Cash Inflow (Outflow)		<u>\$ 8,000</u>

Once again, operating costs are ignored in that Jerry pays his own operating costs in both Option 1 and Option 2. As was the case with the Lexus ES, Option 2 is the preferred alternative. The economic basis for this result is the fact that in Option 2, Jerry benefits from the trade in value of the car, while in Option 1, this benefit goes to the Company.

Although the requirements of the problem ask that only the cash flows be considered, we would note that the alternative of purchasing the car carries more uncertainty. Both the resale value and the actual operating costs are estimates. If there was a large variation from the estimate for either or both of these amounts, it could substantially affect the total cash outflow of the purchase alternative.

## Solution to Assignment Problem Three - 4

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### Case A

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$30,000)(12)(7,200/20,004*)]	\$2,591
Operating Cost Benefit - Lesser Of:	
• [(7,200)(\\$0.28)] = \$2,016	
• [(1/2)(\\$2,591)] = \$1,296	1,296
Total Benefit	\$3,887

\*[(12)(1,667)]

As Mr. Stickler's usage is more than 50 percent employment related, he can use the one-half the standby charge as his operating cost benefit.

### Case B

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$30,000)(10)(15,000/16,670*)]	\$5,399
Operating Cost Benefit - Lesser Of:	
• [(15,000)(\\$0.28)] = \$4,200	
• [(1/2)(\\$5,399)] = \$2,700	2,700
Total Benefit	\$8,099

\*[(10)(1,667)]

As Mr. Stickler's usage is more than 50 percent employment related, he can use the one-half the standby charge as his operating cost benefit.

### Case C

In this Case, the taxable benefit would be calculated as follows:

Standby Charge [(2%)(\\$30,000)(6)]	\$ 3,600
Operating Cost Benefit [(25,200)(\\$0.28)]	7,056
Total Benefit	\$10,656

As his employment usage was less than 50 percent, there is no reduction in the basic standby charge. This also means that Mr. Stickler cannot elect to use the alternative calculation of the operating costs benefit as one-half of the standby charge.

## Solution to Assignment Problem Three - 5

**Ms. Marianne Dorsey** The taxable benefit to be allocated to the president of the Company would be calculated as follows:

Standby Charge [(2%)(11)(\$185,000)]	\$40,700
Operating Cost Benefit [(53,000 - 18,000)(\$0.28)]	9,800
<b>Total Benefit</b>	<b>\$50,500</b>

As less than 50 percent of Marianne's kilometers were employment related, she cannot reduce the standby charge or use the alternative calculation of the operating cost benefit, based on one-half of the standby charge, even if it was more advantageous.

**Mr. John Dorsey** The taxable benefit to be allocated to the vice president of finance would be calculated as follows:

Standby Charge [(2%)(71,500)(10)(16,670/16,670*)]	\$14,300
Operating Cost Benefit - Lesser Of:	
• [(22,000)(\$0.28)] = \$6,160	
• [(1/2)(\$14,300)] = \$7,150	6,160
<b>Total Benefit</b>	<b>\$20,460</b>

\*The numerator cannot exceed the denominator which is equal to [(10)(1,667)]

While John is eligible for the reduced standby charge calculation, his personal use is more than 1,667 kilometers per month of availability. This means that the reduction formula leaves the standby charge unchanged. While he eligible for the alternative calculation of the operating cost benefit, it would produce a larger taxable benefit in this situation.

**Ms. Misty Dorsey** The taxable benefit to be allocated to the vice president of design would be calculated as follows:

Standby Charge [(2/3)(12)(\$620 - \$100)]	\$ 4,160
Operating Cost Benefit [(51,000 - 14,000)(\$0.28)]	10,360
Reimbursement [(12)(\$200)]	( 2,400)
<b>Total Benefit</b>	<b>\$12,120</b>

As less than 50 percent of the kilometers are employment related, there is no reduction in the standby charge. In addition, the alternative calculation of the operating cost benefit cannot be used.

**Mr. Saul Dorsey** The taxable benefit that would be allocated to the marketing vice president would be calculated as follows:

Standby Charge [(2/3)(8)(\$1,200)(1,700/13,336*)]	\$816
Operating Cost Benefit - Lesser Of:	
• [(1,700)(\$0.28)] = \$476	
• [(1/2)(\$816)] = \$408	408
<b>Total Benefit</b>	<b>\$1,224</b>

\*[(8)(1,667)]

As more than 50 percent of the use was employment related, there is a reduction in the standby charge. As the car was driven more than 50 percent for employment related purposes, Saul can calculate the operating cost benefit as one-half of the standby charge which results in a lower benefit.

## Solution to Assignment Problem Three - 6

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### Part A

The first year tax consequences for Trisha would be that she would be assessed a taxable benefit on the loan of \$4,500 [(2%)(\\$225,000)] for the current year. This would result in an increase in her Tax Payable of \$2,205 [(49%)(\\$4,500)].

The cost of the loan to the company for the first year would be calculated as follows:

Lost Earnings On Funds Loaned [(11%)(\\$225,000)]	\$24,750
Corporate Taxes On Imputed Earnings (At 27 Percent)	( 6,683)
Net Cost To Company - Loan	\$18,067

This will result in Trisha having the use of \$225,000 at a tax cost to herself of \$2,205 and an annual cost of \$18,067 to the Company.

### Part B

If instead of giving Trisha the \$225,000, the Company pays her the potentially lost annual earnings of \$24,750, the after tax cost to the Company will be the same, as shown in the following calculation:

Additional Salary	\$24,750
Savings In Corporate Taxes (At 27 Percent)	( 6,683)
Net Cost To Company - Salary	\$18,067

### Part C

Trisha can borrow on a loan at a rate of interest of 4.8 percent. This means that the annual interest payments on \$225,000 would amount to \$10,800 [(4.8%)(\\$225,000)].

If she receives the additional salary, her after tax income would be as follows:

Additional Salary	\$24,750
Tax Payable (At 49 Percent)	( 12,128)
Net Increase In Cash	\$12,622

Trisha should accept the additional salary of \$24,750 per year as it results in an annual net cash inflow of \$1,822 (\$24,750 - \$12,128 - \$10,800) after paying the tax and the mortgage interest. This compares to a cash outflow of \$2,205 if the company extends the loan to Trisha.

## Solution to Assignment Problem Three - 7

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### **Alternative 1 - Provide Additional Salary**

In the absence of the interest free loan, Ms. Monson would borrow \$300,000 at 4.5 percent, requiring an annual interest payment of \$13,500. In determining the amount of salary needed to carry this loan, consideration has to be given to the fact that additional salary will be taxed at 46 percent.

As the interest is not deductible, additional salary of \$25,000 [ $\$13,500 \div (1 - 0.46)$ ] is needed.

Using this figure, the employer's after tax cash flow required to provide sufficient additional salary for the Ms. Monson to carry a conventional \$300,000 mortgage would be calculated as follows:

Required Salary [ $\$13,500 \div (1 - 0.46)$ ]	\$25,000
Tax Savings From Deducting Salary [ $(\$25,000)(28\%)$ ]	( 7,000)
<u>Employer's After Tax Cash Flow - Additional Salary</u>	<u>\$18,000</u>

### **Alternative 2 - Provide The Loan**

If the loan is provided, Ms. Monson will have a taxable benefit of \$6,000 [(2% - Nil)( $\$300,000$ )], resulting in additional taxes payable of \$2,760 [(46%)( $\$6,000$ )]. To make this situation comparable to the straight salary alternative, Elmwood Inc. will have to provide Ms. Monson with both the loan amount and sufficient additional salary to pay the \$2,760 in taxes on the benefit that will be assessed.

The required amount would be \$5,111 [ $\$2,760 \div (1 - 0.46)$ ].

Elmwood Inc.'s cash flow associated with the after tax cost of providing the additional salary as well as the after tax lost earnings on the \$300,000 loan amount would be calculated as follows:

Required Salary [ $\$2,760 \div (1 - 0.46)$ ]	\$ 5,111
Tax Savings From Deducting Salary [ $(\$5,111)(28\%)$ ]	( 1,431)
<u>After Tax Cost Of Salary To Cover Taxes On Benefit</u>	<u>\$ 3,680</u>
Employer's Lost Earnings [(7%)( $1 - 0.28$ )( $\$300,000$ )]	15,120
<u>Employer's After Tax Cash Flow - Loan</u>	<u>\$18,800</u>

### **Conclusion**

Given these results, on the basis of cash flows only, payment of additional salary appears to be the better alternative. However, the difference between the alternatives is relatively small. As Ms. Monson is a highly valued employee, there could be non-financial advantages to providing the loan such as employee loyalty and the retention of her services especially if the loan is for a longer period of time.

## Solution to Assignment Problem Three - 8

### Part A

There would be no tax effects resulting from the granting of the options in 2017.

As Floretta's employer is a public company, the exercise of the options in 2018 will result in the following addition to Net Income For Tax Purposes and Taxable Income:

Fair Market Value At Exercise		
[(1,000)(\$27)]		\$27,000
[(1,000)(\$32)]		32,000
<hr/>		
Total Fair Market Value		\$59,000
Option Price [(2,000)(\$19)]		( 38,000)
<hr/>		
Employment Income		
= Increase In <b>Net Income For Tax Purposes</b>		\$21,000
ITA 110(1)(d) Deduction [(1/2)(\$21,000)]		( 10,500)
<hr/>		
Increase In <b>Taxable Income</b>		\$10,500
<hr/>		

In 2019, when the shares are sold, there is the following addition to **Net Income For Tax Purposes** and **Taxable Income**:

Proceeds Of Disposition [(2,000)(\$30)]		\$60,000
Adjusted Cost Base		
[(1,000)(\$27)]	(\$27,000)	
[(1,000)(\$32)]	( 32,000)	( 59,000)
<hr/>		
Capital Gain		\$ 1,000
Inclusion Rate		1/2
<hr/>		
Taxable Capital Gain		\$ 500
<hr/>		

### Part B

There would be no tax effects resulting from the granting of the options in 2017.

If the 2017 trading value for the shares had been \$22, the option price would have been below the fair market value and the ITA 110(1)(d) deduction would not be available. On this basis, the 2018 results would be as follows:

Fair Market Value At Exercise		
[(1,000)(\$27)]		\$27,000
[(1,000)(\$32)]		32,000
<hr/>		
Total Fair Market Value		\$59,000
Option Price [(2,000)(\$19)]		( 38,000)
<hr/>		
Employment Income		
= Increase In <b>Net Income For Tax Purposes</b>		\$21,000
= Increase In <b>Taxable Income</b>		\$21,000
<hr/>		

The results for 2019 would be unchanged from Part A.

### Part C

If Floretta's employer had been a Canadian controlled private company, there would be no tax effects in either 2017 or 2018.

With respect to Part A, when the shares are sold in 2019, the results would be as follows:

Fair Market Value At Exercise		
[(1,000)(\$27)]		\$27,000
[(1,000)(\$32)]		32,000
<hr/>		
Total Fair Market Value		\$59,000
Option Price [(2,000)(\$19)]		( 38,000)
<hr/>		
Employment Income		\$21,000
Taxable Capital Gain		
Proceeds Of Disposition	\$60,000	
Adjusted Cost Base	( 59,000)	
<hr/>		
Capital Gain	\$ 1,000	
Inclusion Rate	1/2	500
<hr/>		
Increase In <b>Net Income For Tax Purposes</b>		\$21,500
ITA 110(1)(d) Deduction [(1/2)(\$21,000)]		( 10,500)
<hr/>		
Increase In <b>Taxable Income</b>		\$11,000
<hr/>		

For Part B, there still would be no deduction under ITA 110(1)(d). Although, for a CCPC, there is a potential deduction equal to 50 percent reduction of the employment income inclusion under ITA 110(1)(d.1), this deduction is conditional on the shares being held for at least two years after exercise. As this was not the case with Floretta's shares, this deduction is not available.

Given this, the results for 2019 are as follows:

Fair Market Value At Exercise		
[(1,000)(\$27)]		\$27,000
[(1,000)(\$32)]		32,000
<hr/>		
Total Fair Market Value		\$59,000
Option Price [(2,000)(\$19)]		( 38,000)
<hr/>		
Employment Income		\$21,000
Taxable Capital Gain		
Proceeds Of Disposition	\$60,000	
Adjusted Cost Base	( 59,000)	
<hr/>		
Capital Gain	\$ 1,000	
Inclusion Rate	1/2	500
<hr/>		
Increase In <b>Net Income For Tax Purposes And Taxable Income</b>		\$21,500
<hr/>		

## Solution to Assignment Problem Three - 9

### Case 1

The required information under the assumption that Salter Inc. is a Canadian controlled private corporation is as follows:

- Year of granting and year of exercise - No tax effect.
- Year of sale - The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$37.80)(410)]	\$15,498.00
Cost Of Acquired Shares [(\$32.00)(410)]	( 13,120.00)
Employment Income	\$ 2,378.00
Taxable Capital Gain [(410)(\$45.80 - \$37.80)(1/2)]	1,640.00
Increase In <b>Net Income For Tax Purposes</b>	\$ 4,018.00
Deduction Under ITA 110(1)(d) [(1/2)(\$2,378)]	( 1,189.00)
Increase In <b>Taxable Income</b>	\$ 2,829.00

As the option price was greater than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction can be taken.

### Case 2

The required information under the assumption that Salter Inc. is a Canadian controlled private corporation is as follows:

- Year of granting and year of exercise - No tax effect.
- Year of sale - As the option price was less than the fair market value of the shares at the time the options were granted, no deduction is available under ITA 110(1)(d). However, Sharon held the shares for more than two years after their acquisition and, as a consequence, she can claim a deduction against employment income under ITA 110(1)(d.1). The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$37.80)(410)]	\$15,498.00
Cost Of Acquired Shares [(\$32.00)(410)]	( 13,120.00)
Employment Income	\$ 2,378.00
Taxable Capital Gain [(410)(\$43.20 - \$37.80)(1/2)]	1,107.00
Increase In <b>Net Income For Tax Purposes</b>	\$ 3,485.00
Deduction Under ITA 110(1)(d)	Nil
Deduction Under ITA 110(1)(d.1) [(1/2)(\$2,378)]	( 1,189.00)
Increase In <b>Taxable Income</b>	\$ 2,296.00

### Case 3

The required information under the assumption that Salter Inc. is a Canadian public company is as follows:

- Year of granting - No tax effect.
- Year of exercise - The results for this year would be as follows:

Fair Market Value Of Acquired Shares [(\$37.80)(410)]	\$15,498.00
Cost Of Acquired Shares [(\$32.00)(410)]	( 13,120.00)
Employment Income And	
Increase In <b>Net Income For Tax Purposes</b>	\$ 2,378.00
Deduction Under ITA 110(1)(d) [(1/2)(\$2,378)]	( 1,189.00)
Increase In <b>Taxable Income</b>	\$ 1,189.00

As the option price was greater than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction can be taken.

- Year of sale - There would a taxable capital gain calculated as follows:

Proceeds Of Disposition [(410)(\$42.10)]	\$17,261.00
Adjusted Cost Base [(410)(\$37.80)]	( 15,498.00)
Capital Gain	\$ 1,763.00
Inclusion Rate	1/2
Taxable Capital Gain	\$ 881.50

This would be both the increase in **Net Income For Tax Purposes** and the increase in **Taxable Income** for the year.

#### Case 4

The required information under the assumption that Salter Inc. is a Canadian public company is as follows:

- Year of granting - No tax effect.
- Year of exercise - As the option price was less than the fair market value of the shares at the time the options were issued, the ITA 110(1)(d) deduction from Taxable Income is not available. As Salter is a public company, no deduction is available under ITA 110(1)(d.1). The tax effects would be as follows:

Fair Market Value Of Acquired Shares [(\$37.80)(410)]	\$15,498.00
Cost Of Acquired Shares [(\$32.00)(410)]	( 13,120.00)
Employment Income And Increase In <b>Net Income For Tax Purposes</b>	\$ 2,378.00
Deduction Under ITA 110(1)(d)	Nil
Increase In <b>Net Income And Taxable Income</b>	\$ 2,378.00

- Year of sale - There would an allowable capital loss calculated as follows:

Proceeds Of Disposition [(410)(\$31.00)]	\$12,710.00
Adjusted Cost Base [(410)(\$37.80)]	( 15,498.00)
Capital Loss	(\$ 2,788.00)
Inclusion Rate	1/2
Allowable Capital Loss	(\$ 1,394.00)

The effect on **Net Income For Tax Purposes** and **Taxable Income** would be nil unless Sharon had taxable capital gains during the year.

**Note to Instructor:** Depending on what has been covered in your course, students may or may not be expected to comment on the ability to carry the capital loss back or forward as follows:

If she has taxable capital gains in the previous 3 years or any year in the future, the loss could be carried back or carried forward and deducted in the determination of Taxable Income.

## Solution to Assignment Problem Three - 10

Ms. Alexa Braxton's net employment income for the year would be calculated as follows:

Salary	\$120,000
Federal And Provincial Income Tax	Nil
EI Premiums	Nil
CPP Contributions	Nil
Union Dues	( 100)
Private Health Care Plan - Employee Portion - Item 6	Nil
Car Benefit - Item 1	3,629
Cash Award - Item 2	Nil
Stock Option Benefit - Item 3	13,000
Child Care Benefit - Item 4	Nil
Discounts On Merchandise - Item 5	Nil
Takeout Meals Eaten While Working Overtime - Item 6	Nil
Private Health Care Plan - Employer Portion - Item 6	Nil
Personal Fitness Trainer Fees - Item 6	700
Computer Related Supplies - Item 7	( 550)
<b>Net Employment Income</b>	<b>\$136,679</b>

**Item 1** The taxable benefit on the car would be calculated as follows:

Standby Charge $[(2\%)(\$33,600)(12)(6,000 \div 20,004^*)]$	\$2,419
Operating Cost Benefit - Lesser Of:	
$[(\$0.28)(6,000)] = \$1,680$	
$[(1/2)(\$2,419)] = \$1,210$	1,210
<b>Total Benefit</b>	<b>\$3,629</b>

\* $[(12)(1,667)]$

**Item 2** As employment income is determined on a cash basis, the \$2,000 will be employment income in 2020.

**Item 3** While there is no employment income inclusion resulting from the exercise of the CCPC stock options, there is an inclusion of \$13,000  $[(1,000)(\$48 - \$35)]$  when the shares are sold. This inclusion would be accompanied by a deduction of \$6,500  $[(1/2)(\$13,000)]$  in the calculation of Taxable Income. However, the deduction does not affect the calculation of net employment income.

**Item 4** If an employer provides, at his place of business, child care that is not available to the general public, it is not considered to be a taxable benefit.

**Item 5** In general, if an employer provides discounts on merchandise, it is not considered a taxable benefit. However, the discounts must be available to all employees and the discounted price cannot be below cost.

As a reminder, IT Folio S2-F3-C2, "Benefits And Allowances Received From Employment" has been withdrawn. It contained an unintended change in policy that resulted in the taxation of discounts provided to employees by their employers.

**Item 6**

- Reimbursing employees or directly paying for meals consumed when employees are required to work overtime does not create a taxable benefit.
- Employer payment of premiums for private health care does not create a taxable benefit. The employee's share of the premiums are medical costs eligible for a credit against Tax Payable. However, this does not affect the calculation of net employment income.
- While mental or physical health counseling is not considered a taxable benefit, this is not the case with a personal fitness trainer.

**Item 7** The iPad has no effect on employment income because it is owned by AAAA. As she makes no personal use of the iPad, there is no taxable benefit related to this asset.

While Alexa owns the printer, as an employee she cannot deduct CCA (tax depreciation) on its capital cost. However, she can deduct the cost of cartridges and supplies.

## Solution to Assignment Problem Three - 11

For an employee who earns commissions, motor vehicle costs (other than CCA and financing costs) and other travel costs can be deducted under either ITA 8(1)(f) or, alternatively a combination of ITA 8(1)(h) and 8(1)(h.1). A potential problem arises in that:

- The total deducted under ITA 8(1)(f) is limited to commission income.
- A commission salesperson cannot use ITA 8(1)(f) for some costs (e.g., entertainment and advertising costs) and use ITA 8(1)(h) and 8(1)(h.1) for his travel costs. If he uses ITA 8(1)(f), he cannot use ITA 8(1)(h) and 8(1)(h.1).

This means that if he is deducting items like entertainment and advertising, which can only be deducted under ITA 8(1)(f), he will have to deduct travel costs under that provision as well. This procedure may result in exceeding the commission income limit.

In order to deal with this problem, separate calculations must be made for ITA 8(1)(f) including motor vehicle and travel costs, and for the total of motor vehicle and travel costs under ITA 8(1)(h) and ITA 8(1)(h.1). Note that the deductions available under ITA 8(1)(i) and ITA 8(1)(j) are not affected by the choice of ITA 8(1)(f) vs. ITA 8(1)(h) and 8(1)(h.1).

The relevant expense deduction calculations are as follows:

	ITA 8(1)(f) (Limited to \$21,460)	ITA 8(1) (h) and (h.1)	ITA 8(1) (i) and (j)
Automobile Costs:			
Operating Costs [(43,000/52,000)(\$10,920)]	\$ 9,030	\$ 9,030	-
Financing Costs [(43,000/52,000)(\$2,750)]	-	-	\$2,274
CCA [(43,000/52,000)(\$4,500)]	-	-	3,721
Professional Dues	-	-	422
Work Space In The Home Costs:			
Interest On Mortgage	-	-	-
Property Taxes [(25%)(\$3,750)]	938	-	-
Utilities [(25%)(\$1,925)]	-	-	481
Insurance [(25%)(\$1,060)]	265	-	-
Repairs [(25%)(\$4,200)]	-	-	1,050
Travel Costs	26,900	26,900	-
Non-Deductible Meals [(50%)(\$11,300)] (Note 1)	( 5,650)	( 5,650)	-
Entertainment [\$1,920 + \$864 + (\$10,500 - \$2,850)]	10,434	-	-
Non-Deductible Entertainment [(50%)(\$10,434)] (Note 2)	( 5,217)	-	-
<b>Total</b>	<b>\$36,700</b>	<b>\$30,280</b>	<b>\$7,948</b>

**Note 1** Jerald can deduct 50 percent of his meals while traveling for his employer. Whether the meals are with clients or not does not affect the deductibility.

**Note 2** The hockey tickets as well as the cost of the golf club meals would be considered to be entertainment costs. As such, only 50 percent of these amounts would be deductible. Note, however, the golf club membership fees are not deductible.

The required calculation of minimum Net Employment Income would be as follows:

Salary	\$175,000
Commissions	21,460
Expenses (\$30,280 + \$7,948 - Note 3)	( 38,228)
RPP Contributions (Note 4)	( 4,100)
Awards And Gifts (\$425 + \$225 - \$500 + \$400) (Note 5)	550
Stock Option Benefit (Note 6)	1,125
<u>Net Employment Income</u>	<u>\$155,807</u>

**Note 3** The deduction of dues and other expenses under ITA 8(1)(i) and automobile capital costs (CCA and financing costs) under ITA 8(1)(j) is permitted without regard to other provisions used.

The deduction for work space in the home costs has been split between ITA 8(1)(i) and (f). Since the utilities and maintenance portions can be deducted under ITA 8(1)(i) by any employee, it is not limited by the commission income. The insurance and property tax components are limited as they are deducted under ITA 8(1)(f). A limitation, which is not illustrated in this problem, prevents the deduction of work space in the home costs from creating an employment loss.

As the ITA 8(1)(f) amount is limited to the \$21,460 in commission income, the total deduction using ITA 8(1)(f), (i) and (j), is \$29,408 (\$21,460 + \$7,948).

Using the combination of ITA 8(1)(h), (h.1), (i), and (j) produces a deduction of \$38,228 (\$30,280 + \$7,948). Note that when this approach is used, work space in the home costs are limited to utilities and maintenance. Further, there is no deduction for entertainment costs. However, this approach results in deductions totaling \$8,820 (\$38,228 - \$29,408) more than the amount available using ITA 8(1)(f), (i), and (j) due to the effect of the commission income limit.

**Note 4** The employer's contributions to the RPP are not considered to be a taxable benefit.

**Note 5** An employee can receive any number of non-cash, non-performance awards and, as long as the total is less than \$500 for the year, there is no taxable benefit. In this case, Jerald receives non-cash awards of \$650 (\$425 + \$225). The extra \$150 (\$650 - \$500) will have to be included in income. In addition, he will have to include the gift certificate for \$400 as it would be considered a near cash award. Note that he could also have received a long-service award of up to \$500 on a tax free basis. However, it does not appear that such an award was given.

**Note 6** There is an employment income inclusion on the exercise of the stock options of \$1,125 [(500)(\$19.75 - \$17.50)]. While there is a deduction equal to one-half of this amount available, it is a deduction from Taxable Income and does not enter into the calculation of net employment income. There is also a taxable capital gain on the sale of the 100 shares, but that too does not enter into the calculation of net employment income.

## Solution to Assignment Problem Three - 12

Mr. Bond's net employment income for the year would be calculated as follows:

Gross Salary		\$ 82,500
Additions:		
Bonus (Note One)	\$20,000	
Automobile Benefit (Note Two)	7,580	
Counseling Benefit (Note Three)	1,500	
Imputed Interest Benefit (Note Four)	375	
Stock Option Benefit [(\$18 - \$15)(1,000)] (Note Five)	3,000	32,455
		<u>\$114,955</u>
Deductions:		
Registered Pension Plan Contributions	(\$3,200)	
Professional Dues	( 1,800)	( 5,000)
Net Employment Income		<u>\$109,955</u>

**Note One** As the bonus is not payable until more than three years after the end of the employer's taxation year, it is a salary deferral arrangement and must be included in income under ITA 6(11).

**Note Two** Since Mr. Bond's employment related usage is not more than 50 percent, there is no reduction of the full standby charge. In addition, he cannot use the alternative calculation of the operating cost benefit. Given this, the automobile benefit is calculated as follows:

Standby Charge [(2%)(47,500)(10)]	\$9,500
Operating Cost Benefit [(6,000)(0.28)]	1,680
Payments Withheld	( 3,600)
Taxable Benefit	<u>\$7,580</u>

**Note Three** Counseling services, with the exception of those items specified under ITA 6(1), are considered taxable benefits. The items specified under ITA 6(1)(a)(iv) are counseling with respect to mental or physical health or with respect to re-employment or retirement. As a consequence, the counseling on personal finances is a taxable benefit.

**Note Four** The imputed interest benefit is calculated as follows:

Taxable Benefit [(\$150,000)(2%)(3/12)]	\$750
Reduction For Interest Paid	( 375)
Net Addition To Employment Income	<u>\$375</u>

**Note Five** Note that the problem asks for net "employment income". Although Mr. Bond is eligible for the ITA 110(1)(d) deduction of one-half the stock option benefit, it is a deduction in the calculation of Taxable Income and will not affect the amount of net employment income. When the shares are sold at \$20, there is a \$2,000 capital gain [(\$20 - \$18)(1,000)]. However, this would not be a component of the required calculation of net employment income.

**Note Six** Other items and the reasons for their exclusion would be as follows:

- Any income tax withheld is not deductible.
- CPP contributions, EI premiums, and United Way donations create credits against taxes payable, but are not deductible in the determination of employment income.
- The payments for personal use of the company car are used in the calculation of the taxable benefit associated with this automobile.

## Solution to Assignment Problem Three - 13

### Part A

The calculations for net employment income would be as follows

	Mega's Offer	Tetra's Offer
Salary	\$280,000	\$190,000
Commissions - Estimated	Nil	90,000
Hotel, Meal, And Airline Allowance (Note One)	Nil	N/A
Hotel, Meal, And Airline Reimbursement (Note Two)	N/A	N/A
Automobile Benefit (Note Three)	12,957	N/A
Automobile Allowance [(12)(\$1,800)] (Note Four)	N/A	21,600
Automobile Costs [(32,000/48,000)(\$23,500)]	N/A	( 15,667)
Loan Benefit [(2%)(\$250,000)]	5,000	N/A
Disability Insurance Benefit (Note Five)	Nil	Nil
Life Insurance Benefits (Note Five)	2,900	4,200
Advertising And Promotion Expense (Note Six)	Nil	( 26,000)
Net Employment Income	\$300,857	\$264,133

**Note One** The \$35,000 per year allowance is considered reasonable and, as a consequence, it does not have to be included in income. In addition, it exceeds the actual costs of \$34,500 (\$24,000 + \$10,500). This means it would not be good tax planning to include the allowance and deduct the actual costs.

**Note Two** Reimbursements have no effect on employment income. They are neither deducted nor included in the determination of Net Employment Income.

**Note Three** The taxable benefit associated with the automobile provided under Mega's offer would be calculated as follows:

Standby Charge [(2%)(\$45,000)(12)(16,000 ÷ 20,004*)]	\$ 8,638
Operating Cost Benefit - Lesser Of:	
• [(16,000)(\$0.28)] = \$4,480	
• [(1/2)(\$8,638)] = \$4,319	4,319
Total Benefit	\$12,957

\* [(12)(1,667)]

**Note Four** Since the allowance is not based on kilometers, it is automatically considered unreasonable and required to be included in income.

**Note Five** The payment of disability insurance premiums by an employer does not create a taxable benefit for employees if the plan provides periodic benefits that compensate for lost employment income. However, the payment of life insurance premiums does create a taxable benefit.

**Note Six** As Alexandra does not receive any commissions under Mega's offer, she cannot deduct her advertising and promotion costs. She can deduct the full amount under Tetra's offer as the \$26,000 total is less than her commissions of \$90,000.

**Part B**

The actual amount of annual cash to be received from the employer under the two offers would be calculated as follows:

	Mega's Offer	Tetra's Offer
Salary	\$280,000	\$190,000
Commissions - Estimated	Nil	90,000
Hotel, Meal, And Airline Allowance	35,000	N/A
Reimbursements	N/A	34,500
Automobile Allowance	N/A	21,600
<b>Total Cash</b>	<b>\$315,000</b>	<b>\$336,100</b>

The fact that Tetra's offer has a higher cash flow suggests that Tetra's offer is preferable. If taxes on employment income were taken into consideration, the result would be even more favourable to this alternative as it also has lower employment income.

A major factor in this result is that the absence of commissions in Mega's offer results in the \$26,000 in advertising and promotion expenses not being deductible. This could easily be fixed at no cost to the employer by having an appropriate amount of the \$35,000 allowance treated as a reimbursement of advertising and promotion expenses. This would leave the unreimbursed hotel, meal, and airline costs which could be deducted by Alexandra without the presence of commission income.

In addition, other factors that have not been considered in this simple analysis include:

- Mega's offer includes the provision of an automobile while Tetra's offer does not. This means that, under Mega's offer, Alexandra could get rid of her personal automobile, resulting in a significant annual savings.
- Tetra's offer requires using estimates of costs for her personal automobile. There is uncertainty with respect to the amount of these costs. They could be higher or lower than estimated.
- Mega's offer includes a \$35,000 travel allowance that would not require receipts. Tetra's offer will reimburse all travel costs which would require all receipts. The additional paperwork would make Tetra's offer less attractive. However, Tetra's offer would be more attractive if her actual travel costs total more than \$35,000. If they total less, than Mega's offer would allow her to keep the difference.
- Mega's offer includes an interest free loan that will be invested. The fact that these funds will be invested means that there will be a deduction available to offset the \$5,000 benefit on the interest free loan. In addition, Alexandra's cash flows are likely to be improved by some amount of return on the investment of the \$250,000 in loan proceeds.
- Tetra's offer contains an estimate of commissions. Unlike the fixed salary provided in Mega's offer, there is uncertainty with respect to the amount of these commissions. They could be higher or lower than estimated. There could also be uncertainty related to the timing of the payment of the commissions.

Given these latter considerations, it is difficult to come to a firm conclusion on the two offers. If the invested funds earn a substantial return, she may be better off with Mega's offer. Correspondingly, it is difficult to quantify the cash flows associated with not owning a personal automobile. In addition, there could be a disadvantage with Tetra's offer if commission income did not reach the predicted level of \$90,000.

## Solution to Assignment Problem Three - 14

Mr. Brooks' net employment income would be calculated as follows:

Gross Salary		\$63,000
Additions:		
Bonus (Amount Received Only)	\$6,500	
Disability Insurance Receipts (Note One)	4,200	
Personal Benefit On Car (Note Two)	1,034	
Stock Option Benefit [(\$28 - \$23)(200)] (Note Three)	1,000	
Interest Free Loan Benefit (Note Four)	625	13,359
		<u>\$76,359</u>
Deductions:		
RPP Contributions	(\$2,800)	
Union Dues	( 240)	( 3,040)
Net Employment Income		<u>\$73,319</u>

**Note One** As all of the premiums were paid by the employer and were not considered to be a taxable benefit, benefits received under this coverage must be included in employment income.

**Note Two** The personal benefit on the company car, taking into consideration the two months he was in the hospital and unable to make use of the car, would be as follows:

Standby Charge [(2/3)(10)(\$678)(5,000/16,670)*]	\$1,356
Operating Cost Benefit - Lesser Of:	
• [(5,000)(\$0.28)] = \$1,400	
• [(1/2)(\$1,356)] = \$678	678
Less: Payments Withheld By Employer	( 1,000)
Taxable Benefit	<u>\$1,034</u>

\*[(10)(1,667)]

**Note Three** Although Mr. Brooks would qualify for the deduction of one-half of the stock option benefit under ITA 110(1)(d), it is a deduction from Taxable Income and would not affect the calculation of net employment income.

**Note Four** The taxable benefit associated with the home relocation loan would be calculated as follows:

$$[(\$125,000)(2\% - \text{Nil})(3/12)] = \$625$$

**Note Five** As it is reasonable to assume that the accounting course would primarily benefit his employer and is not for personal interest, the fees reimbursed by his employer would not create a taxable benefit. The unreimbursed tuition fees for the music history course may qualify for a tuition tax credit which will be discussed in Chapter 4.

## CHAPTER FOUR SOLUTIONS

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### Solution to Assignment Problem Four - 1

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#### Case 1

Cammy Tarbell will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal (\$12,069 - \$8,650)	3,419
EI (Maximum)	860
CPP (Maximum)	2,749
Canada Employment	1,222
<b>Total Credit Base</b>	<b>\$20,319</b>
Rate	15%
<b>Total Credits</b>	<b>\$ 3,048</b>

#### Case 2

Scotty Severa will qualify for the following credits:

Basic Personal Amount	\$12,069
Eligible Dependant	12,069
<b>Total Credit Base</b>	<b>\$24,138</b>
Rate	15%
<b>Total Credits</b>	<b>\$ 3,621</b>

**Note** The eligible dependant credit can be taken for any child. It should not be claimed for the 15 year old as the amount of the credit would be reduced due to his income.

#### Case 3

Donald Preble will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal (\$12,069 - \$6,340)	5,729
Canada Caregiver - Diane	7,140
<b>Total Credit Base</b>	<b>\$24,938</b>
Rate	15%
<b>Total Credits</b>	<b>\$ 3,741</b>

**Case 4**

Bibi Spillman will qualify for the following tax credits:

Basic Personal Amount	\$12,069
Spousal (\$12,069 - \$6,250)	5,819
Age [\$7,494 - (15%)(\$65,420 - \$37,790)]	3,350
Pension Income	2,000
<hr/>	
Total Credit Base	\$26,238
Rate	15%
<hr/>	
Total Credits	\$ 3,186

Note that, because her income is below the income threshold, there will be no claw-back of Ms. Spillman's OAS receipts.

**Case 5**

Clarice McBryde will qualify for the following tax credits:

Basic Personal Amount	\$12,069
Spousal	12,069
EI (Maximum)	860
CPP (Maximum)	2,749
Canada Employment	1,222
Canada Caregiver For Child	2,230
Transfer Of Disability	8,416
Disability Supplement (No Child Care Costs)	4,909
Home Accessibility Amount - Lesser Of:	
Actual Costs = \$12,500	
Credit Base Limit = \$10,000	10,000
Medical Expenses (See Note)	22,313
<hr/>	
Total Credit Base	\$76,837
Rate	15%
<hr/>	
Total Credits	\$11,526

**Note** The claim for medical expenses includes both the net medical fees paid (after reimbursement) and the cost of installing the ramps. Note that, when it is claimed as a medical expense, the total cost of the ramps is not limited to \$10,000.

The first \$10,000 of the ramp's cost is double counted, once in the base for the home accessibility credit and again in the base for medical expenses.

Net Medical Fees Paid	\$12,165
Cost Of Accessibility Ramps	12,500
Reduced By The Lesser Of:	
• [(3%)(\$132,400)] = \$3,972	
• 2019 Threshold Amount = \$2,352	( 2,352)
<hr/>	
Allowable Medical Expenses	\$22,313

## Solution to Assignment Problem Four - 2

The federal Tax Before Credits is the same in all five of the cases in this problem. It is calculated as follows:

Tax On First \$47,630	\$ 7,145
Tax On Next \$12,370 (\$60,000 - \$47,630) At 20.5 Percent	2,536
<b>Tax Before Credits</b>	<b>\$9,681</b>

### Case A

The solution to this Case can be completed as follows:

Tax Before Credits		\$9,681
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$8,800)	( 3,269)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Canada Caregiver [\$7,140 - (\$18,000 - \$16,766)]	( 5,906)	
<b>Credit Base</b>	<b>(\$26,075)</b>	
Rate	15%	( 3,911)
<b>Federal Tax Payable</b>		<b>\$ 5,770</b>

As Bernice is dependent because of a mental infirmity, William can claim the Canada caregiver credit.

### Case B

The solution to this Case can be completed as follows:

Tax Before Credits		\$9,681
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$4,410)	( 7,659)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Medical Expenses (\$3,150)		
Reduced By The Lesser Of:		
• [(3%)(\$60,000)] = \$1,800		
• 2019 Threshold Amount = \$2,352	1,800	
	( 1,350)	
<b>Credit Base</b>	<b>(\$25,909)</b>	
Rate	15%	( 3,886)
<b>Federal Tax Payable</b>		<b>\$ 5,795</b>

**Case C**

The solution to this Case can be completed as follows:

Tax Before Credits		\$9,681
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$4,500)	( 7,569)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Transfer From Son (Note)	( 5,000)	
Credit Base	(\$29,469)	
Rate	15%	( 4,420)
Federal Tax Payable		\$ 5,261

**Note:** The transfer from the son is as follows:

Tuition Fees	\$ 9,000
Maximum Transfer	( 5,000)
Carry Forward (For Allen's Use Only)	\$ 4,000

Allen's Tax Payable is completely eliminated by his basic personal credit. He can transfer a maximum of \$5,000 of his tuition amount to his father. The remaining \$4,000 can be carried forward indefinitely, but must be used by Allen.

**Case D**

The solution to this Case can be completed as follows:

Tax Before Credits		\$9,681
Basic Personal Amount	(\$12,069)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Credit Base	(\$16,900)	
Rate	15%	( 2,535)
Political Contributions Tax Credit		
$[(3/4)(\$400) + (1/2)(\$350) + (1/3)(\$250)]$		( 558)
Charitable Donations $[(15\%)(\$200) + (29\%)(\$15,000 - \$200)]$		( 4,322)
Federal Tax Payable		\$ 2,266

As none of his income is taxed at 33 percent, this rate will not be applicable to the calculation of the charitable donations tax credit.

Unused charitable donations can be carried forward for up to five years. The limitation of 75 percent of Net Income For Tax Purposes would have given Mr. Norris a maximum credit based on \$45  $[(75\%)(\$60,000)]$  in charitable donations. However, if he chose that amount, the credit would be larger than his Tax Payable. Because this is a non-refundable credit, he should not use an amount of the contribution that would create a credit larger than his tax otherwise payable.

This leaves Mr. Norris with \$35,000  $(\$50,000 - \$15,000)$  in charitable donations that can be carried forward for five years. He will be subject to the 75 percent limitation of Net Income For Tax Purposes in any year he claims the charitable donations.

**Case E**

The solution to this Case can be completed as follows:

Tax Before Credits		\$9,681
Basic Personal Amount	(\$12,069)	
Eligible Dependant - Mary	( 12,069)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Interest On Student Loan	( 450)	
Credit Base	(\$29,419)	
Rate	15%	( 4,413)
Federal Tax Payable		\$ 5,268

## Solution to Assignment Problem Four - 3

### Federal Tax Before Credits

For all of the following Cases, except Case G, the Federal Tax Before Credits would be calculated as follows:

Tax On First \$47,630	\$ 7,145
Tax On Next \$17,370 (\$65,000 - \$47,630) At 20.5 Percent	3,561
<b>Federal Tax Before Credits</b>	<b>\$10,706</b>

### Case A

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Credit Base	(\$16,900)	
Rate	15%	
Political Contributions Tax Credit		( 2,535)
[(3/4)(\$400) + (1/2)(\$350) + (1/3)(\$250)]		( 558)
<b>Federal Tax Payable</b>		<b>\$ 7,613</b>

### Case B

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$4,650)	( 7,419)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Medical Expenses (Note)	(\$3,150)	
Reduced By The Lesser Of:		
• [(3%)(\$65,000)] = \$1,950		
• 2019 Threshold Amount = \$2,352	1,950	
	( 1,200)	
Credit Base	(\$25,519)	
Rate	15%	
		( 3,828)
<b>Federal Tax Payable</b>		<b>\$ 6,878</b>

**Note** Eileen's income does not affect the medical expenses credit.

**Case C**

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$9,400)	( 2,669)	
Canada Caregiver - Albert	( 7,140)	
Transfer Of Albert's Disability	( 8,416)	
Medical Expenses (Note)	( 8,350)	
Credit Base	(\$38,644)	
Rate	15%	( 5,797)
Federal Tax Payable		\$ 4,909

**Note** The base for the medical expense tax credit would be calculated as follows:

Expenses For Roger And Martha		\$1,250
Reduced By The Lesser Of:		
• [(3%)(\$65,000)] = \$1,950		
• 2019 Threshold Amount = \$2,352		( 1,950)
Subtotal		Nil*
Albert's Medical Expenses	\$8,350	
Reduced By The Lesser Of:		
• [(3%)(Nil)] = Nil		
• 2019 Threshold Amount = \$2,352	Nil	8,350
Base For Medical Expense Credit		\$8,350

\* Medical expenses can only be reduced to nil, the net result cannot be negative in this calculation.

**Case D**

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
Spousal (Income Too High)	Nil	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Interest On Student Loan	( 375)	
Credit Base	\$17,275	
Rate	15%	( 2,591)
Federal Tax Payable		\$ 8,115

As the father and the aunt do not have a mental or physical infirmity, the Canada caregiver credit is not available for either dependant.

**Case E**

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
Common-Law Partner (\$12,069 - \$4,500)	( 7,569)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
First Time Home Buyer (Maximum)	( 5,000)	
<hr/>		
Credit Base	(\$29,469)	
Rate	15%	( 4,420)
<hr/>		
Federal Tax Payable		\$ 6,286
<hr/>		

**Case F**

The solution for this Case is as follows:

Federal Tax Before Credits (As Previously Calculated)		\$10,706
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$5,050)	( 7,019)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Transfer From Son (Note)	( 5,000)	
<hr/>		
Credit Base	(\$28,919)	
Rate	15%	( 4,338)
<hr/>		
Federal Tax Payable		\$ 6,368
<hr/>		

**Note** The transfer from the son is as follows:

Tuition Fees	\$5,400
Maximum Transfer	( 5,000)
<hr/>	
Carry Forward (For Albert's Use Only)	\$ 400
<hr/>	

Albert's Tax Payable is completely eliminated by his basic personal credit. He can transfer a maximum of \$5,000 of his tuition amount to his father. The remaining \$400 can be carried forward indefinitely, but must be used by Albert.

**Case G**

The solution for this Case is as follows:

Tax [(15%)( $\$44,250$ )]		\$6,638
Basic Personal Amount	(\$12,069)	
Spousal Including Infirm Amount		
( $\$12,069 + \$2,230 - \$8,100$ )	( 6,199)	
Additional Caregiver Amount (Note)	( 941)	
Age [ $\$7,494 - (15\%)(\$44,250 - \$37,790)$ ]	( 6,525)	
Pension	( 2,000)	
Spouse's Age	( 7,494)	
Spouse's Disability	( 8,416)	
Spouse's Pension (Limited To RPP Receipt)	( 450)	
Credit Base	(\$44,094)	
Rate	15%	( 6,614)
Federal Tax Payable		\$ 24

**Note** As the income adjusted spousal amount is less than the regular caregiver amount, there is an additional amount of \$941 ( $\$7,140 - \$6,199$ ).

Martha's Registered Pension Plan receipt is eligible for the pension income credit, but the Old Age Security and Canada Pension Plan receipts are not. As Martha's income is below the relevant income threshold, there is no reduction in her age credit.

Neither Roger nor Martha's income is high enough to have an OAS clawback.

Since Albert is not infirm, Roger cannot claim him as a dependant.

## Solution to Assignment Problem Four - 4

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The amount of the personal tax credits would be as follows:

1. **Ms. Jones** will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal (\$12,069 - \$3,750)	8,319
<hr/>	
Total Credit Base	\$20,388
Rate	15%
<hr/>	
Total Credits	\$ 3,058
<hr/>	

There is no tax credit available for her son.

2. **Ms. Martin** will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal Including Infirm Amount (\$12,069 + \$2,230)	14,299
Age	7,494
Pension	2,000
Spouse's Disability	8,416
<hr/>	
Total Credit Base	\$44,278
Rate	15%
<hr/>	
Total Credits	\$ 6,642
<hr/>	

As Ms. Martin's Net Income For Tax Purposes is less than the relevant income thresholds, there will be no reduction in her age credit or clawback of her OAS benefits.

3. **Mr. Sharp** will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal	12,069
Canada Caregiver Amount (20 Year Old Child)	7,140
<hr/>	
Total Credit Base	\$31,278
Rate	15%
<hr/>	
Total Credits	\$ 4,692
<hr/>	

4. **Mr. Barton** will qualify for the following credits:

Basic Personal Amount	\$12,069
Eligible Dependant (Any Child)	12,069
<hr/>	
Total Credit Base	\$24,138
Rate	15%
<hr/>	
Total Credits	\$ 3,621
<hr/>	

5. **Ms. Cole** will qualify for the following credits:

Basic Personal Amount	\$12,069
Spousal (\$12,069 - \$36,000)	Nil
EI (Maximum)	860
CPP (Maximum)	2,749
Canada Employment	1,222
<hr/>	
Total Credit Base	\$16,900
Rate	15%
<hr/>	
Total Credits	\$ 2,535
<hr/>	

Her husband's income will have to be considered for the entire year and, with him having a total of \$36,000 (\$33,000 + \$3,000), the spousal credit will be eliminated.

6. **Mr. Smead** will qualify for the following credits:

Basic Personal Amount	\$12,069
Eligible Dependant - Son	12,069
Canada Caregiver - Mother	
[\$7,140 - (\$18,500 - \$16,766)]	5,406
<hr/>	
Total Credit Base	\$29,544
Rate	15%
<hr/>	
Total Credits	\$ 4,432
<hr/>	

Given the mother's high level of income, the eligible dependant credit should be claimed for the son. This will allow for the Canada caregiver credit to be claimed for the mother.

## Solution to Assignment Problem Four - 5

### Net Employment Income

Tanja's net employment income would be calculated as follows:

Gross Salary	\$ 93,500
Additions:	
Bonus (Note 1)	Nil
Chinese Course Tuition	3,600
Disability Benefits (Note 2)	5,480
Automobile Benefit (Note 3)	3,317
Financial Counseling Benefit (Note 4)	450
Performance Award (Note 5)	5,620
Stock Option Benefit (Note 6)	1,750
Deductions:	
Registered Pension Plan Contributions	( 4,150)
Operating Costs Deduction (Note 7)	( 6,003)
<b>Net Employment Income</b>	<b>\$103,564</b>

**Note 1** As none of the bonus was paid in 2019, none of it will be included in Tanja's 2019 employment income.

**Note 2** The \$6,500 in benefits can be offset by the cumulative amount of Tanja's contributions. This amount is \$1,020  $[(3)(\$340)]$ , leaving a net benefit of \$5,480  $(\$6,500 - \$1,020)$ .

**Note 3** The standby charge for personal use of the company car would be calculated as follows:

$$[(2\%)(11)(\$39,500)][(41,000 - 34,000) \div (11)(1,667)] = \$3,317$$

As Tanja paid her own operating costs, there would be no operating cost benefit.

**Note 4** Employer provided financial counseling is a taxable benefit.

**Note 5** Performance awards are a taxable benefit.

**Note 6** The stock option benefit would be calculated as follows:

$$[(250)(\$32 - \$25)] = \$1,750$$

**Note 7** As Tanja paid the operating costs on the company provided car, she can deduct the portion related to employment activities. This amount would be calculated as follows:

$$[(34,000 \div 41,000)(\$7,240)] = \$6,003$$

### Taxable Income

Tanja's Taxable Income would be calculated as follows:

Net Employment Income	\$103,564
Search And Rescue Compensation (Note 8)	200
Net Income For Tax Purposes	\$103,764
Stock Option Deduction $[(1/2)(\$1,750)]$ (Note 6)	( 875)
<b>Taxable Income</b>	<b>\$102,889</b>

**Note 8** This compensation could have been excluded from income under ITA 81(4)(b). However, if Tanja had excluded this amount, she would not be eligible for the volunteer search and rescue tax credit. Given that the value of this credit is \$450  $[(15\%)(\$3,000)]$  in taxes saved, including this \$200 in income is the better alternative.

**Tax Payable**

Tanja's federal Tax Payable would be calculated as follows:

Tax On First \$95,259		\$16,908
Tax On Next \$7,630 (\$102,889 - \$95,259) At 26 Percent		1,984
<hr/>		
Federal Tax Before Credits		\$18,892
Basic Personal Amount	(\$12,069)	
Eligible Dependant Including Infirm Amount - Cynthia (\$12,069 + \$2,230 - \$6,425) (Note 9)	( 7,874)	
Transfer Of Cynthia's Disability	( 8,416)	
Cynthia's Disability Supplement	( 4,909)	
Canada Caregiver - Mother (Note 10)	Nil	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Home Accessibility (Maximum)	( 10,000)	
Volunteer Search And Rescue	( 3,000)	
Tuition (Note 11)	( 3,600)	
Medical Expenses (Note 12)	( 31,299)	
<hr/>		
Credit Base	(\$85,998)	
Rate	15%	( 12,900)
Charitable Donations (Note 13) [(15%)(200) + (29%)(3,500 - 200)]		( 987)
<hr/>		
Federal Tax Payable		\$ 5,005
<hr/>		

**Note 9** Cynthia qualifies for the Canada caregiver amount as an eligible dependant. As a result, she is not eligible for the Canada caregiver amount for a child.

**Note 10** Tanja's mother is not infirm. Given this, the Canada caregiver credit is not available for her.

**Note 11** Since her employer's payment for her tuition was included in her employment income, Tanja can claim the tax credit for the tuition.

**Note 12** The base for the home accessibility credit is limited to a maximum of \$10,000. There is no maximum for renovations qualifying for the medical expenses credit. As a result, in addition to the listed medical expenses, the full \$14,600 of the home accessibility costs can be included in the medical expense credit base. The liposuction costs are cosmetic and are not a qualifying medical expense.

Tanja And Cynthia's Qualifying Medical Expenses (\$14,600 + \$3,465 + \$10,490 + \$875)		\$29,430
Reduced By The Lesser Of:		
• [(3%)(103,764)] = \$3,113		
• 2019 Threshold Amount = \$2,352	( 2,352)	
Mother's Medical Expenses (\$3,300 + \$1,325)	\$4,625	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(13,460)] = \$404	( 404)	4,221
<hr/>		
Allowable Medical Expenses		\$31,299
<hr/>		

**Note 13** As none of her income is taxed at 33 percent, this rate will not be applicable to the calculation of the charitable donations tax credit.

## Solution to Assignment Problem Four - 6

### Part A

Ms. Van Horne's minimum Net Income For Tax Purposes would be calculated as follows:

Salary	\$126,000
Add:	
Commissions	32,000
Bonus [(1/2)(\$25,000)]	12,500
Employer's Life Insurance Contribution	550
Automobile Benefit (Note 1)	2,237
Stock Option Benefit (Note 2)	30,000
Deduct:	
RPP Contributions	( 7,400)
Employment Related Expenses (Note 3)	( 17,700)
<b>Net Income For Tax Purposes</b>	<b>\$178,187</b>

**Note 1** The automobile benefit would be calculated as follows:

Standby Charge [(2/3)(11)(\$728 - \$50)(5,500 ÷ 18,337*)]	\$1,491
Operating Cost Benefit - Lesser Of:	
• [(1/2)(\$1,491)] = \$746	
• [(\$0.28)(5,500)] = \$1,540	746
<b>Total Benefits</b>	<b>\$2,237</b>

\*[(11)(1,667)]

As Ms. Van Horne's employment related use was more than 50 percent, there is a reduction in the standby charge and she can use the alternative calculation of the operating cost benefit.

**Note 2** The employment income inclusion resulting from the exercise of the stock option is \$30,000 [(5,000)(\$31 - \$25)]. As the option price was equal to the market price at the time the options were issued, one-half of this amount can be deducted in the determination of Taxable Income.

**Note 3** As Ms. Van Horne's commission income was \$32,000, her deductible expenses are not limited by this constraint. They are calculated as follows:

Advertising	\$5,600
Entertainment [(1/2)(\$9,000)]	4,500
Meals (reimbursed)	Nil
Hotels [(1/2)(\$8,400)]	4,200
Airline Tickets	3,400
<b>Deductible Expenses</b>	<b>\$17,700</b>

### Part B

Ms. Van Horne's minimum Taxable Income would be calculated as follows:

Net Income For Tax Purposes	\$178,187
Stock Option Deduction [(1/2)(\$30,000)]	( 15,000)
<b>Taxable Income</b>	<b>\$163,187</b>

### Part C

Based on the Taxable Income calculated in Part B, Ms. Van Horne's Tax Payable would be calculated as follows:

Tax On First \$147,667		\$30,535
Tax On Next \$15,520 (\$163,187 - \$147,667) At 29 Percent		4,501
<hr/>		
Tax Before Credits		\$35,036
Basic Personal Amount	(\$12,069)	
Eligible Dependant - Son [(\$12,069 - \$2,500)]	( 9,569)	
Caregiver (Note 4)	( 7,140)	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Transfer Of Tuition (Note 5)	( 5,000)	
Medical Expenses (Note 6)	( 3,700)	
<hr/>		
Credit Base	(\$42,309)	
Rate	<u>15%</u>	( 6,346)
Charitable Donations [(15%)(200) + (29%)(1,800 - 200)]		( 494)
Federal Political Contributions [(3/4)(400) + (1/2)(350) + (1/3)(900 - 400 - 350)]		( 525)
<hr/>		
Federal Tax Payable		<u>\$27,671</u>

**Note 4** The father's \$8,000 income is below the threshold for the caregiver credit (his casino winnings are not included in his Net Income For Tax Purposes). This means that Ms. Van Horne can claim the full amount of the caregiver credit.

**Note 5** The transfer from her daughter is as follows:

Tuition Fees	\$ 7,000
Total Amount Available	\$7,000
Maximum Transfer	( 5,000)
<hr/>	
Carry Forward (For Daughter's Use Only)	\$ 2,000

Her daughter's Tax Payable is completely eliminated by her basic personal credit. She can transfer a maximum of \$5,000 of her tuition amounts to her mother. The remaining \$2,000 can be carried forward indefinitely, but must be used by her daughter.

**Note 6** The base for Ms. Van Horne's medical expense credit can be calculated as follows:

Ms. Van Horne And Her Children (\$850 + \$1,480)	\$2,330	
Reduced By The Lesser Of:		
[(3%)(178,187)] = \$5,346		
2019 Threshold Amount = \$2,352	( 2,352)	Nil
Father's Medical Expenses	\$3,940	
Reduced By The Lesser Of:		
\$2,352		
[(3%)(8,000)] = \$240	( 240)	3,700
<hr/>		
Allowable Medical Costs		<u>\$3,700</u>

## Solution to Assignment Problem Four - 7

### Part A

Lydia's minimum Net Income For Tax Purposes would be calculated as follows:

Salary	\$73,500
Additions:	
Bonus (Note 1)	6,000
Stock Options (Note 2)	Nil
Automobile Benefit (Note 3)	1,176
Gifts (Note 5)	650
Interest Free Loan Benefit (Note 6)	1,333
Deductions:	
RPP Contributions	( 2,600)
Professional Dues	( 350)
Client Meals And Entertainment (Note 4)	Nil
<b>Net Income For Tax Purposes</b>	<b>\$79,709</b>

**Note 1** The \$4,000 that will be paid in 2020 is not included in Net Income For Tax Purposes until it is paid. However, the amount that will be paid in 2023 is a salary deferral arrangement and, given this, it will have to be included in 2019 Net Income For Tax Purposes.

**Note 2** The stock option benefit would be calculated as follows:

$$[(200)(\$90 - \$72)] = \$3,600$$

Since the employer is a CCPC, the taxation of this benefit is deferred until the shares are sold. Note that, because the option price was less than the fair market value of the shares at the time the options were granted, no ITA 110(1)(d) deduction will be available in the determination of Taxable Income when they are sold. However, if she holds the shares for more than 2 years before selling, she will be eligible for the ITA 110(1)(d.1) deduction.

**Note 3** The automobile benefit would be calculated as follows:

Standby Charge $[(2/3)(11)(\$565 - \$75)(4,000 \div 18,337^*)]$	\$ 784
Operating Cost Benefit - Lesser Of:	
• $[(1/2)(\$784)] = \$392$	
• $[(\$0.28)(4,000)] = \$1,120$	392
<b>Total Benefits</b>	<b>\$1,176</b>

$$*[(11)(1,667)]$$

As Lydia's employment related use was more than 50 percent, the reduced standby charge is available. In addition, she can use the alternative calculation of the operating cost benefit.

**Note 4** Lydia's meal and entertainment costs exceed her employer's reimbursement by \$2,400 (\$5,600 - \$3,200). However, as she has no commission income, she cannot deduct these out-of-pocket costs.

**Note 5** The gift certificate for \$150 is taxable because it is a near-cash gift. The first \$500 of the long-service award will not be a taxable benefit. However, the excess of \$500 (\$1,000 - \$500) will be a taxable benefit. As the value of the Christmas gift basket is under \$500, it will not create a taxable benefit. The total taxable benefit for gifts is \$650 (\$150 + \$500).

**Note 6** The taxable benefit on the loan is calculated as follows:

$$[(2\%)(\$100,000)(8/12)] = \$1,333$$

**Part B**

As there are no Division C deductions, Lydia's Taxable Income would be equal to her Net Income For Tax Purposes of \$79,709. There would be no stock option deduction as there was no stock option benefit.

**Part C**

Lydia's Tax Payable would be calculated as follows:

Tax On First \$47,630		\$ 7,145
Tax On Next \$32,079 (\$79,709 - \$47,630) At 20.5 Percent		6,576
<hr/>		
Federal Tax Before Credits		\$13,721
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$8,600)	( 3,469)	
Canada Caregiver - Mary	( 7,140)	
Transfer Of Harry's Tuition (Note 7)	( 2,969)	
First-Time Home Buyers'	( 5,000)	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Medical Expenses (Note 8)	( 19,032)	
<hr/>		
Credit Base	(\$54,510)	
Rate	15%	( 8,177)
<hr/>		
Charitable Donations [(15%)(200)		
+ (29%)(2,000 - 200)] (Note 9)		( 552)
<hr/>		
Federal Tax Payable		\$ 4,992
<hr/>		

**Note 7** Harry will have to reduce his own Tax Payable to nil before transferring any part of his tuition amount. He will require \$2,031 (\$14,100 - \$12,069) of this amount and his transfer will be limited to \$2,969 (\$5,000 - \$2,031). This will leave Harry with a carry forward of \$6,300 (\$11,300 - \$2,031 - \$2,969). The residence costs are not eligible for a credit.

**Note 8** There are three medical expenses in the problem that do not qualify for the medical expenses tax credit, Botox treatment, hair replacement procedures and liposuction. (These exclusions are listed in the textbook.) All of the allowable medical expenses of Lydia, Mark and Barry are eligible for reimbursement from the health care plan and the reimbursement is deducted. As both Mary and Harry are older than 17, their expenses are not eligible for reimbursement.

The base for Lydia's medical expense credit can be calculated as follows:

Lydia - Prescriptions		\$2,500
Lydia - Botox treatments		Nil
Mark - Dentist's fees for root canals (3)		7,200
Mark - Hair replacement procedures		Nil
Barry - Dentist's fees, including \$1,000 for a tooth replacement		2,100
<hr/>		
Allowable Medical Expenses		\$11,800
Reimbursement [(50%)(11,800)]		( 5,900)
Reduced By The Lesser Of:		
• [(3%)(79,709)] = \$2,391		
• 2019 Threshold Amount = \$2,352		( 2,352)
Mary's Allowable Medical Expenses		
(\$8,400 + \$3,900 + Nil)	\$12,300	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(3,100)] = \$93	( 93)	12,207
Harry's Allowable Medical Expenses		
(\$1,500 + \$2,200)	\$3,700	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(14,100)] = \$423	( 423)	3,277
<hr/>		
Allowable Medical Costs		\$19,032
<hr/>		

**Note 9** As none of her income is taxed at 33 percent, this rate will not be applicable to the calculation of the charitable donations tax credit.

## Solution to Assignment Problem Four - 8

### Part 1 - Net Income For Tax Purposes

Ezra's Net Income For Tax Purposes would be calculated as follows:

Salary Received	\$163,000
Additions	
Additional Salary (Note 1)	Nil
Travel Cost Allowance (Note 2)	12,000
Gifts And Awards (Note 3)	350
Life Insurance Taxable Benefit (Note 4)	675
Accident and Sickness Insurance Taxable Benefit (Note 5)	472
Deductions:	
Home Office Costs (Note 6)	( 2,009)
Travel Costs (Note 7)	( 11,025)
Net Employment Income	\$163,463
Employer's RPP	26,000
Other RPP Receipts	35,000
Canada Pension Plan Benefits	13,000
Net Income For Tax Purposes	\$237,463

**Note 1** As the additional salary will not be received until 2020, it will not be included in Ezra's 2019 employment income

**Note 2** As this allowance includes compensation for automobile use and is not based on actual kilometers, it would not be considered reasonable and must be included in Ezra's income.

**Note 3** As the award is in the form of cash, it must be included in income. However, the gift basket is non-cash and has a value of less than \$500. It can be excluded from income.

**Note 4** The \$675 paid by the employer for life insurance is a taxable benefit and is included in his employment income.

**Note 5** With respect to the accident and sickness plan, the benefits are not received on a periodic basis and are not paid for loss of wages. Therefore, the employer's contributions are a taxable benefit, requiring a \$472 income inclusion. Given that the premiums paid are a taxable benefit, the benefits received are not taxable.

**Note 6** Ezra's deductible home office costs can be calculated as follows:

Electricity	\$ 4,680
Repairs To Roof	4,970
Lawn Maintenance	863
Snow Removal	647
Total Deductible Costs	\$11,160
Deductible Portion	18%
Deductible Amount	\$ 2,009

IT-352R2 indicates "minor repairs" are deductible by all employees. There is a possibility that \$4,970 in roof repairs would be viewed by some as too high to be "minor", but it would also depend on the cost of the work with respect to the total cost, i.e., the cost of the roof itself. Insurance and property taxes can only be deducted by employees with commission income. Mortgage interest cannot be deducted by any employee, only by individuals earning business income.

**Note 7** As the travel allowance was included in income, Ezra can deduct the following travel costs:

Hotels	\$ 4,200
Meals While Travelling [(50%)(\$1,650)]	825
Airline Tickets	2,150
Automobile Costs [(16,000 ÷ 32,000)(3,200 + \$4,500)]	3,850
<u>Total Deductible Costs</u>	<u>\$11,025</u>

### **Part 2 - Taxable Income**

As Ezra has no deductions from Net Income For Tax Purposes, his Taxable Income is equal to his Net Income For Tax Purposes of \$237,463.

### **Part 3 - Federal Tax Payable**

Since Ezra has not applied for OAS, there can be no clawback of it. Ezra's federal Tax Payable would be calculated as follows:

Tax On First \$210,371	\$48,719
Tax On Next \$27,092 (\$237,463 - \$210,371) At 33 Percent	8,940
<u>Federal Tax Before Credits</u>	<u>\$57,659</u>
Basic Personal Amount	(\$12,069)
Spousal Including Infirm Amount (\$12,069 + \$2,230 - \$8,420)	( 5,879)
Additional Caregiver Amount (Note 8) Martin (Note 9)	( 1,261) Nil
Canada Caregiver - Ezekial (Note 10) [\$7,140 - (\$17,300 - \$16,766)]	( 6,606)
Canada Caregiver - Blaze (Note 10)	Nil
Age [\$7,494 - (15%)(237,463 - \$37,790)]	Nil
Pension	( 2,000)
Pension Transfer From Spouse	( 2,000)
Disability Transfer From Spouse	( 8,416)
Home Accessibility Amount (Note 11)	( 10,000)
CPP (Not Applicable)	Nil
EI	( 860)
Canada Employment	( 1,222)
Medical Expenses (Note 12)	( 17,852)
	(\$68,165)
Rate	15% ( 10,225)
<u>Charitable Donations (Note 13)</u>	<u>( 15,555)</u>
<u>Federal Tax Payable</u>	<u>\$31,879</u>

**Note 8** As the income adjusted spousal amount is less than the Canada caregiver amount, there is an additional amount of \$1,261 (\$7,140 - \$5,879).

**Note 9** While he appears to be dependent on Ezra, Martin is not infirm. While Ezra will be able to use his medical expenses in calculating his medical expense credit, no other credit is available for Martin.

**Note 10** As Ezekial has a physical infirmity, Ezra can claim the Canada caregiver credit for him. As Blaze, Ezekial's common-law partner, is not infirm, he cannot claim the Canada caregiver credit for her.

**Note 11** The base for the home accessibility tax credit is the lesser of the actual qualifying costs of \$12,600 (\$11,400 + \$1,200) and a maximum value of \$10,000. Although there are two qualifying individuals (Laurie and Ezekial) for which qualifying expenditures have been made, the maximum of \$10,000 applies to improvements made to the same eligible dwelling.

**Note 12** With respect to the medical expenses, the \$11,400 in home accessibility costs to improve mobility for Laurie in the home would be a qualified medical expense. However, the exterior lighting would not qualify. The breast enhancement reversal for Blaze would be considered cosmetic and would also not be included. Given this, the base for the medical expense tax credit can be calculated as follows:

Ezra And Laurie (\$2,850 + \$3,420 + \$11,400)	\$17,670
Reduced By The Lesser Of:	
• [(3%)(\$237,463)] = \$7,124	
• 2019 Threshold Amount = \$2,352	( 2,352)
 Martin	 \$2,470
Reduced By The Lesser Of:	
• [(3%)(\$3,400)] = \$102	
• \$2,352	( 102)      2,368
 Ezekial	 \$685
Reduced By The Lesser Of:	
• [(3%)(\$17,300)] = \$519	
• \$2,352	( 519)      166
Total	\$17,852

**Note 13** Although Laurie made the donation, Ezra can claim the credit and should because he has income that is taxed at 33 percent. Even if Laurie could use the credit (which she can't), it would be worth less. Ezra's charitable donations tax credit would be calculated as follows:

$$[(15\%)(A)] + [(33\%)(B)] + [(29\%)(C)], \text{ where}$$

$$A = \$200$$

B = The Lesser Of:

$$\bullet \$50,000 - \$200 = \$49,800$$

$$\bullet \$237,463 - \$210,371 = \$27,092 \text{ (Note Taxable Income is used here)}$$

$$C = \$22,708 [\$50,000 - (\$200 + \$27,092)]$$

The charitable donation credit would be equal to \$15,555, calculated as [(15%)(\\$200)] + [(33%)(\\$27,092)] + [(29%)(\\$22,708)].

## Solution to Problem Tax Software Four - 1

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This problem and solution contain 2018 (not 2019) information as software for 2019 is not yet available. Shortly after the first filing version of the 2019 Intuit ProFile software is available in January, 2020, the updated 2019 version of this problem will be available on MyLab at:

**<http://www.pearsonmylabandmastering.com>**

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### **Analysis**

Since Mr. Musician's Net Income For Tax Purposes is only his employment income of \$16,500, his Tax Payable before credits is only \$2,475  $[(15\%)(\$16,500)]$ , less than his available non-refundable credits. Given this, he should not claim credits that can either be used by others or carried forward to subsequent years.

Based on this approach, he should not transfer any of the tuition amounts as Richard and Sarah can carry forward these amounts indefinitely.

He would also not claim the credit for charitable donations as it can be carried forward for 5 years.

Medical expenses can also be carried forward to the following year, but the problem states that Mr. Musician wishes to claim his medical expenses on a calendar year basis. Given all his allowable medical expenses are eligible for the refundable medical expense supplement, it would be advisable for him not to carry forward any medical expenses.

A Home Accessibility Credit of \$870  $[(15\%)(\$5,800)]$  is available. However, since Mr. Musician's non-refundable tax credits already exceed his Tax Payable, he cannot take advantage of this credit and it cannot be carried forward.

Based on this analysis, his total credits will exceed his Tax Payable in this version of the problem. However, there are no further alternatives for using or carrying forward any other credits.

### **Notes To Tax Return**

- His employer overdeducted for EI by \$20.
- Mr. Musician can claim the Canada caregiver tax credit for his mother. He can claim the full amount because she does not have income in excess of the threshold. As Earl is not disabled, no credit can be claimed for his father.
- Mr. Musician's mother's unused disability tax credit can be transferred to him. If she filed a tax return, her age credit (which cannot be transferred to Buddy) would eliminate any Tax Payable.
- The medical expense rules require that the medical expense payments be paid in respect of medical services provided to persons who are dependants of Buddy within the meaning of ITA 118(6). ITA 118(6) requires that the persons be dependent on Buddy at some point during the year for support and that they are his children. Since it is stated in the problem that the children of Ms. Nurse and Mr. Musician are not dependent on him for support, Megan's medical expenses cannot be claimed by him.

- An individual can claim a tax credit based on the medical expenses of a spouse and any other individual who meets the ITA 118(6) definition of a dependant. The medical expenses of Lori Musician (\$300) and Dolly Nurse (\$675) would not be eligible as neither woman is his spouse or common-law partner.
- Mr. Musician does not qualify for the Climate Action Incentive (CAI) as a resident of B.C. This is a refundable credit available to residents of Ontario, Saskatchewan, Manitoba and New Brunswick and is based on family size.

### **Tax Planning Points**

- Richard, Sarah, Eunice, and Earl should all file tax returns in order to receive the GST credit. Filing a tax return will also make the unused tuition tax credits of Richard and Sarah easier to keep track of for carry forward purposes. Sarah, Eunice, and Earl will need to have a Social Insurance Number to file returns.
- Buddy has paid installments based on the CRA's Instalment Reminders. Given the amount of his refund, they were unnecessary. Buddy should review his estimated net tax owing periodically in the future to determine whether instalments should be paid.
- Buddy has paid the dental expenses for Ms. Nurse and Megan Nurse, but cannot claim them as Ms. Nurse is not a spouse and Megan is not a dependant of Buddy's. Ms. Nurse cannot claim the dental expenses as she has not paid for them. If there is an agreement between Buddy and Ms. Nurse that requires him to pay her and their children's dental and medical expenses, or he chooses to pay these costs for other reasons, it would be better from a tax point of view if Buddy gave Ms. Nurse the funds to pay the medical expenses rather than pay them personally. That way Ms. Nurse could claim the expenses that he cannot.
- Since Buddy cannot claim Lori Musician's medical expenses either, it would be better from a tax point of view if he gave Lori the funds to pay her own expenses so that she can claim them.

## Solution to Problem Tax Software Four - 2

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### **Notes To Tax Return**

- Since Valerie's father David is not a Canadian resident, he cannot be claimed as a dependant. His medical expense cannot be claimed either.
- Valerie's age credit is transferred to George as her Net Income For Tax Purposes is less than the basic personal amount.
- On the Dependants form, for Joan the question "Mentally or physically infirm?" must be answered yes. Given the doctor's letter, Joan would qualify.
- Kevin's disability credit is transferred to George. The \$3,500 in childcare costs will decrease the disability supplement available and is entered on the Dependants form.
- Kevin qualifies for the Canada caregiver credit for a child because he is eligible for the disability tax credit.
- Martin's tuition credit can only be transferred to a spouse, parent, or grandparent. As a result, it cannot be transferred to George and must be carried forward by Martin for his own use.
- The reimbursement of George's employment expenses has no effect on his income taxes.
- The cost of a residential phone line, the internet connection, mortgage interest, and mortgage life insurance premiums cannot be deducted as work space in the home costs. George's work space in the home expenses are input on form T777Details. George lives in Ontario, so his expenses would normally include HST. Since we are ignoring HST implications, this means that we are ignoring the GST/HST rebate. At the top of the T777Details form "Do you qualify for the GST/HST Rebate?" is answered "No". With that box ticked, it does not make a difference to the calculations what column the expenses are put into.
- The new computer and software are capital assets and no part of their cost can be deducted as an employment expense.
- George qualifies for the Climate Action Incentive (CAI). This is a refundable credit available to residents of Ontario, Saskatchewan, Manitoba and New Brunswick and is based on family size. It is claimed on Schedule 14.
- Although it will not affect George Pharmacy, Martin should file his tax return to receive the GST credit and the Climate Action Incentive (CAI). Filing a tax return will also make his tuition tax credits easier to keep track of for carry forward purposes.
- Joan Drugstore should file a tax return to receive the GST credit and the Climate Action Incentive (CAI). She would need a Social Insurance Number before she can file a return.

## Solution to Problem Tax Software Four - 3

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This problem and solution contain 2018 (not 2019) information as software for 2019 is not yet available. Shortly after the first filing version of the 2019 Intuit ProFile software is available in January, 2020, the updated 2019 version of this problem will be available on MyLab at:

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### ***Notes To Tax Return***

- Either spouse can claim the charitable donations made by the couple, including donations on T4s. Since Seymour has no tax liability, Mary should claim the charitable donations.
- Mary qualifies for the Climate Action Incentive (CAI). This is a refundable credit available to residents of Ontario, Saskatchewan, Manitoba and New Brunswick and is based on family size. It is claimed on Schedule 14.

## CHAPTER FIVE SOLUTIONS

### Solution to Assignment Problem Five - 1

#### Part A

Note that the calculation of UCC balances is not required. The required calculation of the maximum CCA is as follows:

	Class 1	Class 8
Opening Balance And CCA Base	\$876,000	\$220,000
CCA Rate	4%	20%
Maximum CCA	\$ 35,040	\$ 44,000
<hr/>		
Class 10.1	Porsche	Cadillac
Opening Balance And CCA Base	\$25,500	\$25,500
CCA Rate	30%	30%
Maximum CCA (Class 10.1 = \$15,300)	\$ 7,650	\$ 7,650
<hr/>		
Opening Balance - Class 10		\$ 95,000
Additions	\$122,000	
Dispositions - Lesser Of:		
• Cost = \$118,000		
• Proceeds Of Disposition = \$87,000	( 87,000)	35,000
Accll Adjustment [(50%)(35,000)]		17,500
CCA Base		\$147,500
CCA Rate		30%
Maximum CCA		\$ 44,250

This gives a maximum amount for CCA of \$138,590 (\$35,040 + \$44,000 + \$7,650 + \$7,650 + \$44,250) for the taxation year.

#### Part B

Since Marion Enterprises only has Net and Taxable Income before CCA of \$53,000, the business may wish to deduct less than the maximum CCA that is available to them. However, there is no question that the business will wish to deduct the \$53,000 that is required to reduce the current year's Taxable Income to nil.

Further, it would be advisable to deduct an additional \$39,000 for a total of \$92,000 (\$53,000 + \$39,000). This would create a business loss in 2019 of \$39,000 (\$53,000 - \$92,000), which could then be carried back to claim refunds of taxes paid in the three preceding years. If we ignore the possibility of loss carry forwards, no additional CCA would be taken in 2019.

Assuming the 2019 CCA deduction is limited to \$92,000, it would normally be deducted in the class or classes with the lowest rates. This would leave the unused amounts in classes with higher rates which, in turn, would maximize the amount that could be deducted in the first profitable years.

This means that the maximum amounts would be deducted from Class 1 and Class 8, for a total of \$79,040. Given this, an additional deduction of \$12,960 (\$92,000 - \$79,040) would be required. As they are both 30 percent declining balance classes, this amount could be taken from either Class 10 or both Class 10.1 assets. Since the Porsche will be sold for about \$75,000, the maximum CCA should be deducted from the Class 10.1 of the Porsche as recapture is not recorded for this class.

Given this, an additional CCA deduction of \$5,310 (\$12,960 - \$7,650) is required.

The additional \$5,310 could be taken from either the Cadillac Class 10.1 or Class 10. The choice here would have to consider the estimated proceeds of disposition and the anticipated disposal date of the Cadillac. For example, if the Cadillac was to be sold for proceeds of less than the UCC balance of \$25,500, the fact that Class 10.1 does not allow terminal losses would have to be considered.

Assuming that the Cadillac will be disposed of at some point for less than its current UCC balance, the remaining \$5,310 would be deducted from its Class 10.1. The total deduction can be summarized as follows:

Class 1 (Maximum Available)	\$35,040
Class 8 (Maximum Available)	44,000
Class 10.1 - Porsche (Maximum Available)	7,650
Class 10.1 - Cadillac (Balance Required)	5,310
<u>Total CCA</u>	<u>\$92,000</u>

This \$92,000 CCA deduction would reduce 2019 Taxable Income to nil. In addition, it would create a loss carry back that could be used to eliminate the Taxable Income reported in the three preceding years, resulting in a refund of any taxes paid during that period.

Note that if there were immediate plans to sell the building for more than its opening UCC, this could affect the choice of Classes to deduct CCA from as any additional CCA taken on Class 1 would have to be added to income as recaptured CCA when the building is sold.

## Solution to Assignment Problem Five - 2

### Item 1 - Class 1

The building would be a Class 1 asset. As it is a new building, is going to be used 100 percent for manufacturing and processing, and it has been put in a separate Class, it is eligible for the enhanced CCA rate of 10 percent. Given this, the required information for this Class is as follows:

January 1, 2019 UCC	Nil
Additions (\$1,656,000 - \$450,000)	\$1,206,000
Accll Adjustment [(50%)(\$1,206,000)]	603,000
CCA Base	\$1,809,000
CCA [(10%)(\$1,809,000)]	( 180,900)
Accll Adjustment Reversal	( 603,000)
January 1, 2020 UCC	\$1,025,100

### Item 2 - Class 3

The required information for Class 3 is as follows:

January 1, 2019 UCC	\$936,000
Dispositions - Lesser Of:	
Capital Cost = \$723,000	
Proceeds Of Disposition = \$972,000	( 723,000)
CCA Base	\$213,000
CCA [(5%)(\$213,000)]	( 10,650)
January 1, 2020 UCC	\$202,350

There would also be a taxable capital gain from the disposition of \$124,500 [(1/2)(972,000 - 723,000)].

### Item 3 - Class 8

The required calculations for Class 8 would be as follows:

January 1, 2019 UCC		\$476,000
Additions	\$163,000	
Dispositions - Lesser Of:		
• Capital Cost = \$105,000		
• Proceeds Of Disposition = \$86,000	( 86,000)	77,000
Accll Adjustment [(50%)(77,000)]		38,500
CCA Base		\$591,500
CCA [(20%)(591,500)]		( 118,300)
Accll Adjustment Reversal		( 38,500)
January 1, 2020 UCC Balance		\$434,700

**Item 4 - Class 10**

The required information for Class 10 would be calculated as follows:

January 1, 2019 UCC		\$876,000
Additions [(3)(\$26,000)]	\$78,000	
Disposition of Truck - Lesser Of:		
• Capital Cost = \$37,000		
• Proceeds Of Disposition = \$16,000	( 16,000)	62,000
Accll Adjustment [(50%)(\$62,000)]		31,000
CCA Base		\$969,000
CCA [(30%)(\$969,000)]		( 290,700)
Accll Adjustment Reversal		( 31,000)
January 1, 2020 UCC Balance		\$647,300

**Item 5 - Class 10.1**

In the case of Class 10.1, recapture is not included in income and terminal losses cannot be deducted. However, in the year of disposition, one-half of the usual CCA can be deducted. This would be \$3,825 [(50%)(30%)(\$25,500)]. The January 1, 2020 UCC balance would be nil.

**Item 6 - Class 13**

The 2017 improvements are being written off over 8 years, the original term of the lease (6 years), plus the renewal of 2 years. This means that the CCA rate for these improvements is 12.5 percent. Based on this and applying the first year rules means that, during the years 2017 and 2018, 18.75 percent of the asset's capital cost was written off, leaving a balance of 81.25 (100.00% - 18.75%) at the beginning of 2019.

This means that the original capital cost of the improvements was \$184,000 (\$149,500 ÷ .8125). Based on this the required calculations would be as follows:

January 1, 2019 UCC		\$149,500
Additions		75,000
CCA Base		\$224,500
CCA:		
• 2017 (\$184,000 ÷ 8)	(23,000)	
• 2019 Improvements Including Accll Adjustment [(150%)(\$75,000) ÷ 6]	( 18,750)	( 41,750)
January 1, 2020 UCC Balance		\$182,750

**Item 7 - Class 50**

The required information for Class 50 can be calculated as follows:

January 1, 2019 UCC		\$47,000
Additions		23,500
Accll Adjustment [(50%)(\$23,500)]		11,750
CCA Base		\$82,250
CCA [(55%)(\$82,250)]		( 45,238)
Accll Adjustment Reversal		( 11,750)
January 1, 2020 UCC		\$25,262

**Item 8 - Class 53**

The required information for Class 53 would be calculated as follows:

January 1, 2019 UCC	\$ 645,000
Additions	232,000
AcclI Adjustment [(100%)(232,000)]	232,000
<hr/>	
CCA Base	\$1,109,000
CCA [(50%)(1,109,000)]	( 554,500)
AcclI Adjustment Reversal	232,000
<hr/>	
January 1, 2020 UCC Balance	\$ 322,500
<hr/>	

**Taxable Capital Gain**

There was a taxable capital gain on the Class 3 building of \$124,500.

**Summary Of The Results (Not Required)**

The maximum CCA for the year ending December 31, 2019 and the January 1, 2020 UCC balances can be summarized as follows:

	Maximum CCA	UCC
Class 1	\$180,900	\$1,025,100
Class 3	10,650	202,350
Class 8	118,300	434,700
Class 10	290,700	647,300
Class 10.1	3,825	Nil
Class 13	41,750	182,750
Class 50	45,238	25,262
Class 53	554,500	322,500

## Solution to Assignment Problem Five - 3

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**NOTE TO INSTRUCTORS** You may wish to advise your students that, until 2019, the half-year rule was in effect.

### 2014 Solution

The required calculations are as follows:

Additions To Class [(20 Cars)(\$12,000)]	\$240,000
One-Half Net Additions [(1/2)(\$240,000)]	( 120,000)
CCA Base	\$120,000
CCA [(30%)(120,000)(122/365)]	( 12,033)
One-Half Net Additions	120,000
January 1, 2015 UCC Balance	\$227,967

Note that one-half of the net additions for the year is deducted to provide the basis for calculating the 2014 CCA, and then added back to establish the opening UCC base for the next period. The other point that is illustrated in this first year is application of the short fiscal period rules. As the business was established on September 1, 2014, its operations were carried out for only 122 of the 365 days in that year. This means that only a proportionate share of the annual CCA charge may be taken. Note that it is the length of the taxation year, not the period of ownership of the assets, which establishes the fraction of the year for which CCA is to be recorded.

### 2015 Solution

The required calculations are as follows:

Opening Balance For The Class	\$227,967
Additions [(5 Cars)(\$12,500)]	62,500
Dispositions - Lesser Of:	
• Capital Cost = 3 @ \$12,000 = \$36,000	
• Proceeds Of Disposition = \$27,500	( 27,500)
One-Half Net Additions [(1/2)(\$62,500 - \$27,500)]	( 17,500)
CCA Base	\$245,467
CCA [(30%)(245,467)]	( 73,640)
One-Half Net Additions	17,500
January 1, 2016 UCC Balance	\$189,327

Here again, one-half of the net additions for the year are deducted in establishing the base for calculating CCA, with the same amount being added back to determine the opening UCC for the next period.

### 2016 Solution

The required calculations are as follows:

Opening Balance For The Class	\$189,327
Dispositions - Lesser Of:	
• Capital Cost = 4 @ \$12,000 = \$48,000	
• Proceeds Of Disposition = \$38,000	( 38,000)
One-Half Net Additions	N/A
CCA Base	\$151,327
CCA [(30%)(151,327)]	( 45,398)
January 1, 2017 UCC Balance	\$105,929

The calculations are simplified by the absence of additions to the delivery car fleet. To establish the CCA base, it is only necessary to deduct the proceeds of the dispositions. The new

UCC is the CCA base, less the CCA for the period.

### 2017 Solution

The required calculations are as follows:

Opening Balance For The Class	\$105,929
Dispositions - Lesser Of:	
• Capital Cost = 13 @ \$12,000	
+ 3 @ \$12,500 = \$193,500	
• Proceeds Of Disposition = \$128,000	( 128,000)
<hr/>	
Negative Ending Balance	(\$ 22,071)
Recaptured CCA (i.e. Recapture)	22,071
<hr/>	
January 1, 2018 UCC Balance	Nil
<hr/>	

The inability to replace the fleet cars in a timely fashion was a costly mistake in that the \$22,071 in recapture will be included in the 2017 Net Income. In a more realistic situation, it is likely that actions would have been taken to delay the retirement of the older cars and, thereby, avoid the tax implications of recapture. Note also that when recapture occurs, the balance in the class for the next period is reduced to zero.

### 2018 Solution

The required calculations are as follows:

Opening Balance For The Class	Nil
Acquisitions [(25 Cars)(\$16,000)]	\$400,000
One-Half Net Additions [(1/2)(\$400,000)]	( 200,000)
<hr/>	
CCA Base	\$200,000
CCA [(30%)(\$200,000)]	( 60,000)
One-Half Net Additions	200,000
<hr/>	
January 1, 2019 UCC Balance	\$340,000
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As was the case in 2014 and 2015, one-half of the net additions must be deducted in establishing the base for CCA and then added back to determine the opening UCC balance for the next period.

### 2019 Solution

The required calculations are as follows:

Opening Balance For The Class	\$340,000
Dispositions - Lesser Of:	
• Capital Cost = 2 @ \$12,500	
+ 25 @ \$16,000 = \$425,000	
• Proceeds Of Disposition = \$268,000	( 268,000)
<hr/>	
Ending Balance With No Remaining Assets In Class	\$ 72,000
Terminal Loss	( 72,000)
<hr/>	
January 1, 2020 UCC Balance	Nil
<hr/>	

After all of the assets in Class 10 have been retired there is still a \$72,000 UCC balance. This results in a terminal loss that will be deducted in full from the Net Income of Golden Dragon Ltd. The terminal loss will also be deducted from the UCC balance leaving a January 1, 2020 balance of nil.

## Solution to Assignment Problem Five - 4

### Class 1 - Building

There were no additions or dispositions in this class. Because the building was purchased new and is used solely for manufacturing and processing, it is eligible for the enhanced rate of 10 percent. As a consequence, the maximum 2019 CCA would be \$34,200 [(10%)(\\$342,000)]. The January 1, 2020 UCC of Class 1 would be \$307,800 (\$342,000 - \$34,200).

### Class 8 - Office Furniture

The required calculations for this class would be as follows:

Opening UCC Balance		\$66,000
Additions	\$12,000	
Dispositions - Lesser Of:		
• Capital Cost = \$35,000		
• Proceeds Of Disposition = Nil	<u>Nil</u>	12,000
Accll Adjustment [(50%)(\\$12,000)]		6,000
CCA Base		\$84,000
2019 CCA [(20%)(\\$84,000)]		( 16,800)
Accll Adjustment Reversal		( 6,000)
January 1, 2020 UCC Balance		<u>\$61,200</u>

Note that the proceeds of disposition from the donation are nil.

### Class 10 - Vehicles

The required calculations for this class would be as follows:

Opening UCC Balance		\$225,000
Additions	\$115,000	
Disposition of Truck Traded-In - Lesser Of:		
• Capital Cost = \$53,000		
• Proceeds Of Disposition = \$15,000	( 15,000)	
Disposition of Sunk Truck - Lesser Of:		
• Capital Cost = \$45,000		
• Proceeds Of Disposition = \$30,000	( 30,000)	70,000
Accll Adjustment [(50%)(\\$70,000)]		35,000
CCA Base		\$330,000
2019 CCA [(30%)(\\$330,000)]		( 99,000)
Accll Adjustment Reversal		( 35,000)
January 1, 2020 UCC Balance		<u>\$196,000</u>

Note that the amount received from the insurance company on the truck is treated as proceeds from a disposition.

### Class 10.1

The BMW was put into a separate Class 10.1 in 2018. In Class 10.1, recapture is not recognized. This means that the \$50,000 in proceeds of disposition can be ignored in calculating 2019 corporate Net Income For Tax Purposes. Note that the taxpayer is permitted to take one-half year's CCA in the year of disposition.

2019 CCA [(1/2)(30%)(\\$25,500)]	\$3,825
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The January 1, 2020 UCC balance for Class 10.1 would be nil.

**Class 12 - Tools**

Tools that cost \$500 or less are allocated to Class 12 where they are not subject to the half-year rule. This means that they are eligible for a write-off rate of 100 percent in the year of acquisition. As a consequence, the entire \$17,000 can be deducted as CCA for 2019, leaving a nil January 1, 2020 UCC balance.

**Class 13 - Leasehold Improvements**

In general, leasehold improvements will be written off over the term of the lease on a straight line basis. For purposes of applying this calculation, the term of the lease would include the first renewal option, beginning in a period after the improvements were made. In the case of the original improvements, the period to be used is 8 years. With respect to the improvements during 2019, the write-off period will be 5 years. The required calculations are as follows:

Opening UCC Balance		\$26,125
Additions		22,000
<hr/>		
CCA Base		\$48,125
CCA:		
• 2016 Improvements ( $\$38,000 \div 8$ )	(\$4,750)	
• 2019 Improvements Including Accll		
Adjustment [ $(150\%)(\$22,000 \div 5)$ ]	( 6,600)	( 11,350)
<hr/>		
January 1, 2020 UCC Balance		\$36,775
<hr/>		

**Class 14.1 - Intangible Assets**

The required calculations for this Class are as follows:

Opening UCC Balance		Nil
Disposition - Lesser Of:		
• Capital Cost = Nil		
• Proceeds Of Disposition = \$100,000		Nil
<hr/>		
January 1, 2020 UCC Balance		Nil
<hr/>		
Proceeds Of Disposition		\$100,000
Capital Cost		Nil
<hr/>		
Capital Gain		\$100,000
Inclusion Rate		1/2
<hr/>		
Taxable Capital Gain		\$ 50,000
<hr/>		

**Class 50 - Computer Hardware**

The required calculations are as follows:

Opening UCC Balance		\$48,000
Additions		11,000
Accll Adjustment [ $(50\%)(\$11,000)$ ]		5,500
<hr/>		
CCA Base		\$64,500
2019 CCA [ $(55\%)(\$64,500)$ ]	( 35,475)	
Accll Adjustment Reversal	( 5,500)	
<hr/>		
January 1, 2020 UCC Balance		\$23,525
<hr/>		

**Class 53 - Manufacturing Equipment**

The required calculations are as follows:

Opening UCC Balance	\$126,000
Dispositions - Lesser Of:	
• Capital Cost = \$450,000	
• Proceeds Of Disposition = \$27,000	( 27,000)
<hr/>	
Ending Balance With No Remaining Assets In Class	\$ 99,000
Terminal Loss	( 99,000)
<hr/>	
January 1, 2020 UCC Balance	Nil
<hr/>	

After all of the assets in Class 53 have been sold there is still a \$99,000 UCC balance. This results in a terminal loss that will be deducted in full from the Net Income of Bostik Manufacturing Company.

**Other Income Effects**

In addition, the following income effects resulted from the information provided in the problem:

Taxable Capital Gain On Class 14.1 Assets	\$50,000
Terminal Loss On Class 53 Assets	( 99,000)
<hr/>	
Total Deduction	(\$49,000)
<hr/>	

**Summary Of CCA And UCC Results (Not Required)**

The maximum 2019 CCA and the January 1, 2020 UCC balances can be summarized as follows:

	Maximum CCA	UCC
Class 1	\$34,200	\$307,800
Class 8	16,800	61,200
Class 10	99,000	196,000
Class 10.1	3,825	Nil
Class 12	17,000	Nil
Class 13	11,350	36,775
Class 14.1	Nil	Nil
Class 50	35,475	23,525
Class 53	Nil	Nil

## Solution to Assignment Problem Five - 5

**NOTE TO INSTRUCTORS** You may wish to advise your students that, until 2019, the half-year rule was in effect.

### CCA For 2017

	Class 1	Class 10	Class 8
Opening Balance	Nil	Nil	Nil
Additions			
Class 1 (\$862,000 - \$220,000)	\$642,000		
Class 10 [(2)(\$36,000)]		\$72,000	
Class 8			\$120,000
One-Half Net Additions	( 321,000)	( 36,000)	( 60,000)
CCA Base	\$321,000	\$ 36,000	\$ 60,000
Maximum CCA (Short Fiscal Year)			
Class 1 [(10%)(321,000)(122 ÷ 365)]*	( 10,729)		
Class 10 [(30%)(36,000)(122 ÷ 365)]		( 3,610)	
Class 8 [(20%)(60,000)(122 ÷ 365)]			( 4,011)
One-Half Net Additions	321,000	36,000	60,000
January 1, 2018 UCC	\$631,271	\$68,390	\$115,989

\*As the Class 1 building is being used more than 90 percent for manufacturing and processing activity and is allocated to a separate Class 1, it would qualify for the 10 percent CCA rate.

The total maximum CCA for 2017 would be \$18,350 (\$10,729 + \$3,610 + \$4,011).

### CCA For 2018

No Transactions	Class 1	Class 8
Beginning UCC	\$631,271	\$115,989
Maximum CCA:		
Class 1 [(10%)(631,271)]	( 63,127)	
Class 8 [(20%)(115,989)]		( 23,198)
January 1, 2019 UCC	\$568,144	\$ 92,791

  

	Class 10	Class 10.1
Beginning UCC	\$ 68,390	Nil
Additions		
Class 10 [(4)(\$38,000)]	152,000	
Class 10.1*		\$30,000
Class 10 Disposition - Lesser Of:		
Capital Cost = \$72,000		
Proceeds = [(2)\$21,000] = \$42,000	( 42,000)	Nil
One-Half Net Additions	( 55,000)	( 15,000)
CCA Base	\$123,390	\$15,000
Maximum CCA		
Class 10 [(30%)(123,390)]	( 37,017)	
Class 10.1 [(30%)(15,000)]		( 4,500)
One-Half Net Additions	55,000	15,000
January 1, 2019 UCC	\$141,373	\$25,500

\*The CCA base for the Class 10.1 (luxury) car is limited to \$30,000.

The total maximum CCA for 2018 would be \$127,842 (\$63,127 + \$23,198 + \$37,017 + \$4,500).

**CCA And Other Tax Consequences For 2019**

	Class 1	Class 10	Class 8
Beginning UCC	\$568,144	\$141,373	\$92,791
Additions	Nil	Nil	Nil
Proceeds Of Disposition - Lesser Of:			
\$683,000 Vs. \$642,000	( 642,000)		
\$136,000 Vs. \$152,000		( 136,000)	
\$53,000 Vs. \$120,000			( 53,000)
Balance With No Remaining Assets	( \$73,856)	\$ 5,373	\$39,791
Class 1 Recapture	73,856		
Terminal Losses		( 5,373)	( 39,791)
January 1, 2020 UCC	Nil	Nil	Nil

With respect to the Class 10.1 vehicle, the *Income Tax Regulations* permit taking one-half of the regular CCA in the year of disposition. Since the final year is not a short fiscal period, this amount would be \$3,825 [(1/2)(30%)(25,500)].

No recapture or terminal loss can be recognized with respect to Class 10.1. However, the balance would be eliminated, leaving a January 1, 2020 UCC of nil.

The only CCA for 2019 would be the Class 10.1 CCA of \$3,825 as Classes 1, 8 and 10 had no CCA for the year. There would be recapture of \$73,856 for Class 1, a terminal loss of \$5,373 for Class 10 and a \$39,791 terminal loss for Class 8.

There would also be a taxable capital on the building of \$20,500.

The results for 2019 can be summarized as follows:

Class 1 Recapture	\$ 73,856
Class 10 Terminal Loss	( 5,373)
Class 8 Terminal Loss	( 39,791)
Class 10.1 CCA	( 3,825)
Total Increase In Business Income	\$24,867
Taxable Capital Gain On Building [(1/2)(\$683,000 - \$642,000)]	20,500
Total Increase In Net Income For Tax Purposes	\$45,367

## Solution to Assignment Problem Five - 6

### Case One

For the year ending December 31, 2019, the maximum CCA, as well as the UCC balance for January 1, 2020 for Mortex's Class 14.1 would be as calculated as follows:

January 1, 2019 Balance	Nil
2019 Additions (\$86,000 + \$75,000)	\$161,000
Accll Adjustment [(50%)(\$161,000)]	80,500
CCA Base	\$241,500
2019 CCA [(5%)(\$241,500)]	( 12,075)
Accll Adjustment Reversal	( 80,500)
January 1, 2020 UCC	\$148,925

The results for 2020, including maximum CCA of \$2,946, would be calculated as follows:

January 1, 2020 UCC	\$148,925
Disposition - Lesser Of:	
Capital Cost = \$161,000	
Proceeds Of Disposition = \$90,000	( 90,000)
CCA Base	\$ 58,925
2020 CCA [(5%)(\$58,925)]	( 2,946)
January 1, 2021 UCC	\$ 55,979

There would be no immediate tax consequences resulting from the sale of goodwill, other than a reduction in the UCC. Note that the capital cost in the calculation is of the single goodwill property.

### Case Two

The fact that the two businesses continued operations means that each would have to have a separate Class 14.1. This would change the 2019 results as follows:

	Business 1	Business 2
January 1, 2019 Balance	Nil	Nil
2019 Additions	\$86,000	\$75,000
Accll Adjustment		
[(50%)(\$86,000)]	43,000	
[(50%)(\$75,000)]		37,500
CCA Base	\$129,000	\$112,500
2019 CCA		
[(5%)(\$129,000)]	( 6,450)	
[(5%)(\$112,500)]		( 5,625)
Accll Adjustment Reversal	( 43,000)	( 37,500)
January 1, 2020 UCC (Total = \$148,925)	\$ 79,550	\$ 69,375

While the total CCA for the year and the total UCC is the same as Case One, it has been recorded in two separate CCA Classes.

With Business 1 having a separate Class 14.1, the results for 2020 would be as follows:

January 1, 2020 UCC - Business 1	\$79,550
Disposition - Lesser Of:	
Capital Cost = \$90,000	
Capital Cost Of Business 1's Goodwill = \$86,000	( 86,000)
Negative Ending Balance	(\$ 6,450)
Recapture Of CCA	6,450
January 1, 2021 UCC - Business 1	Nil
January 1, 2020 UCC - Business 2	\$69,375
2020 CCA [(5%)(69,375)]	( 3,469)
January 1, 2021 UCC - Business 2	\$65,906
Proceeds Of Disposition	\$90,000
Capital Cost Of Business 1's Goodwill	( 86,000)
Capital Gain	\$ 4,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 2,000

There would be recapture of \$6,450, maximum CCA of \$3,469 and a taxable capital gain of \$2,000 resulting in a net increase in Net Income For Tax Purposes of \$4,981 (\$6,450 - \$3,469 + \$2,000).

### Case Three

For the year ending December 31, 2019, the maximum CCA, as well as the UCC balance for January 1, 2020 for Mortex's Class 14.1 would be as calculated as follows:

January 1, 2019 Balance	Nil
2019 Additions (\$96,000 + \$113,000)	\$209,000
Accll Adjustment [(50%)(209,000)]	104,500
CCA Base	\$313,500
2019 CCA [(5%)(313,500)]	( 15,675)
Accll Adjustment Reversal	( 104,500)
January 1, 2020 UCC	\$193,325

The results for 2020 would be as follows:

January 1, 2020 UCC	\$193,325
Disposition - Lesser Of:	
Capital Cost Of Goodwill = \$96,000	
Proceeds Of Disposition = \$102,000	( 96,000)
CCA Base	\$ 97,325
2020 CCA [(5%)(97,325)]	( 4,866)
January 1, 2021 UCC	\$ 92,459
Proceeds Of Disposition	\$102,000
Capital Cost Of Goodwill	( 96,000)
Capital Gain	\$ 6,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 3,000

While Mortex would still have a goodwill account, the capital cost would be nil. There would be maximum CCA of \$4,866 and a taxable capital gain of \$3,000 resulting in a net decrease in Net Income For Tax Purposes of \$1,866.

#### Case Four

The fact that the franchise was sold, rather than the acquired business, will not change the results for 2019. However, the results of the 2020 disposition would be altered as follows:

January 1, 2020 UCC	\$193,325
Disposition - Lesser Of:	
Capital Cost Of Franchise = \$113,000	
Proceeds Of Disposition = \$102,000	( 102,000)
CCA Base	\$91,325
2020 CCA [(5%)(91,325)]	( 4,566)
January 1, 2021 UCC	\$ 86,759

As there are still assets in the Class, no terminal loss on the franchise can be recognized. Maximum CCA is equal to \$4,566. The capital cost of the goodwill would be unchanged at \$96,000.

As a reminder, note that a capital loss cannot result from the disposition of a depreciable asset.

#### Case Five

The results for 2019 are the same as those for Case Three and Four. However, the increase in the proceeds of disposition would alter the 2020 results as follows:

January 1, 2020 UCC	\$193,325
Disposition - Lesser Of:	
Capital Cost Of Franchise = \$113,000	
Proceeds Of Disposition = \$135,000	( 113,000)
CCA Base	\$ 80,325
2020 CCA [(5%)(80,325)]	( 4,016)
January 1, 2021 UCC	\$ 76,309
Proceeds Of Disposition	\$135,000
Capital Cost Of Franchise	( 113,000)
Capital Gain	\$ 22,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 11,000

As a positive balance remains in the Class at the end of the year, there would be no recapture of CCA. Once again, the capital cost of the goodwill would be unchanged at \$96,000.

There would be maximum CCA of \$4,016 and a taxable capital gain of \$11,000 resulting in a net increase in Net Income For Tax Purposes of \$6,984.

## Solution to Assignment Problem Five - 7

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### **Furniture - Class 8**

The tax consequences of the sale of furniture can be analyzed as follows:

Opening UCC Balance	\$24,000
Dispositions - Lesser Of:	
• Capital Cost = \$52,000	
• Proceeds Of Disposition = \$36,000	( 36,000)
Negative Ending Balance	(\$12,000)
Recaptured CCA	12,000
January 1, 2020 UCC Balance	Nil

There would be no Class 8 CCA for the year.

### **Old Buildings - Class 1**

CCA on the old Class 1 Buildings would be calculated as follows:

Opening UCC Balance	\$562,000
Dispositions - Lesser Of:	
• Capital Cost = \$135,000 (\$335,000 - \$200,000)	
• Proceeds Of Disposition = \$152,000 (\$352,000 - \$200,000)	( 135,000)
Amount Subject To CCA	\$427,000
CCA [(4%)(\$427,000)]	( 17,080)
January 1, 2020 UCC Balance	\$409,920

In addition, the sale of the building would result in a taxable capital gain that would be calculated as follows:

Proceeds Of Disposition (\$352,000 - \$200,000)	\$152,000
Capital Cost (\$335,000 - \$200,000)	( 135,000)
Capital Gain	\$ 17,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 8,500

### **New Building - Separate Class 1**

As the new building is used 100 percent for non-residential purposes and has been allocated to a separate Class 1, it is eligible for CCA at a 6 percent rate. The required calculations are as follows:

Capital Cost (\$325,000 - \$75,000)	\$250,000
AccII Adjustment [(50%)(250,000)]	125,000
CCA Base	\$375,000
CCA [(6%)(375,000)]	( 22,500)
AccII Adjustment Reversal	( 125,000)
January 1, 2020 UCC Balance	\$227,500

**Automobiles - Class 10**

The tax consequences of the sale of the automobiles can be analyzed as follows:

Opening UCC Balance	\$220,000
Dispositions - Lesser Of:	
• Capital Cost = \$315,000	
• Proceeds Of Disposition = \$185,000	( 185,000)
Ending Balance With No Remaining Assets In Class	\$ 35,000
Terminal Loss	( 35,000)
January 1, 2020 UCC Balance	Nil

This terminal loss must be deducted in calculating net business income for the year ending December 31, 2019. As a consequence, there will be no Class 10 CCA for the year.

**Other Income Effects**

In addition to CCA, the following income effects resulted from the information provided in the problem:

Recapture On Class 8 Assets	\$12,000
Taxable Capital Gain On Class 1 Building	8,500
Terminal Loss On Class 10 Assets	( 35,000)
Total Deduction	(\$14,500)

**Summary Of The CCA Results (Not Required)**

The maximum CCA for the year ending December 31, 2019 and the January 1, 2020 UCC balances can be summarized as follows:

	Maximum CCA	UCC
Class 8	Nil	Nil
Class 1	\$17,080	\$409,920
Class 1 (Separate Class)	22,500	227,500
Class 10	Nil	Nil

## Solution to Assignment Problem Five - 8

### **New Separate Class 1**

Since the building is new, used 100 percent for non-residential purposes and allocated to a separate Class 1, it qualifies for an enhanced CCA rate. As it is not being used more than 90 percent for manufacturing and processing, the enhanced rate is 6 percent. Using this rate, the CCA on the new building would be as follows:

Opening UCC Balance	Nil
Additions (\$950,000 - \$150,000)	\$ 800,000
Accll Adjustment [(50%)(800,000)]	400,000
CCA Base	\$1,200,000
Rate	6%
Maximum CCA	\$ 72,000

### **Old Class 1**

The required calculations for the old Class 1 are as follows:

Opening UCC Balance	\$606,929
Disposition - Lesser Of:	
Proceeds (\$800,000 - \$200,000) = \$600,000	
Capital Cost (\$900,000 - \$200,000) = \$700,000	( 600,000)
Terminal Loss (No Remaining Assets)	\$ 6,929

As this building was the last asset in the old Class 1, and the new building is being allocated to a new and separate Class 1, the post-disposition balance of \$6,929 is a fully deductible terminal loss.

### **Class 8**

The required calculation here would be as follows:

Opening UCC Balance	\$347,291
Additions	111,256
Disposals - Lesser Of:	
Capital Cost = \$58,425	
Proceeds = \$20,000	( 20,000)
Accll Adjustment [(50%)(111,256 - \$20,000)]	45,628
CCA Base	\$484,175
Rate	20%
Maximum CCA	\$ 96,835

### **Class 10**

The required calculations here would be as follows:

Opening UCC Balance	\$142,800
Disposals - Lesser Of:	
Capital Cost = \$240,000	
Proceeds = \$150,000	( 150,000)
Negative Ending Balance = Recapture	(\$ 7,200)

The \$7,200 in recapture would be included in Microhard's Net Income For Tax Purposes.

**Class 10.1**

The BMW would be allocated to a separate Class 10.1. The amount would be limited to \$30,000, resulting in maximum CCA of \$13,500  $[(150\%)(30\%)(\$30,000)]$ . Since the car is owned by a corporation, the kilometers driven for personal purposes would affect the taxable benefit of the president, but does not affect the CCA for the Company.

**Class 13**

Class 13 is a straight-line class. The original term of the lease, plus the first renewal, requires a straight-line write off over 8 years. The improvements in 2019 will be written off over 6 years. Given this, the maximum CCA would be calculated as follows:

2017 Improvements $(\$216,000 \div 8)$	\$27,000
2019 Improvements Including Accll Adjustment $[(150\%)(\$42,000 \div 6)]$	10,500
<b>Maximum CCA</b>	<b>\$37,500</b>

**CEC Transition And Class 14.1**

The May 1, 2015 purchase of the unlimited life franchise would be allocated to CEC. The balance in this account on December 31, 2016 would be calculated as follows:

	<b>CEC Balance</b>	<b>CEC/CCA Deductions</b>
May 1, 2015 Addition $[(3/4)(\$124,000)]$	\$93,000	
CEC Amount At 7 Percent	( 6,510)	\$ 6,510
December 31, 2015 Balance	\$86,490	
CEC Amount At 7 Percent	( 6,054)	6,054
CEC Balance - December 31, 2016		
Becomes January 1, 2017 Class 14.1 Balance	\$80,436	
CCA Deduction For 2017 At 7 Percent	( 5,631)	5,631
Class 14.1 Balance - January 1, 2018	\$74,805	
CCA Deduction For 2018 At 7 Percent	( 5,236)	5,236
Class 14.1 Balance - January 1, 2019	\$69,569	\$23,431

The December 31, 2016 balance in CEC will, under the applicable transition rules, become the January 1, 2017 balance in Class 14.1. Also note that, because this balance is based on a pre-2017 CEC balance, the rate is 7 percent, rather than the current rate for Class 14.1 of 5 percent.

Given this information, the consequences of the disposal would be calculated as follows:

UCC Balance January 1, 2019	\$ 69,569
Deemed Acquisition - Lesser Of:	
25% Of Proceeds Of Disposition $[(25\%)(\$136,000)] = \$34,000$	
25% Of Capital Cost $[(25\%)(\$124,000)] = \$31,000$	31,000
Adjusted UCC Balance	\$100,569
Disposition - Lesser Of:	
Proceeds Of Disposition = \$136,000	
Capital Cost = \$124,000	( 124,000)
Negative Ending Balance = Recapture Of CEC	(\$ 23,431)

Note that the recapture is equal to the sum of the CEC/CCA deductions taken in 2015, 2016, 2017 and 2018.

In addition to the recapture, there would be a taxable capital gain on the disposition, calculated as follows:

Proceeds Of Disposition	\$136,000
Capital Cost	( 124,000)
<hr/>	
Capital Gain	\$ 12,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain	\$ 6,000
<hr/>	

### **Other Income Effects**

In addition to CCA, the following income effects resulted from the information provided in the problem:

- a Class 1 terminal loss of \$6,929,
- Class 10 recapture of \$7,200,
- Class 14.1 recapture of \$23,431, and
- a taxable capital gain of \$6,000 on the sale of the franchise.

### **Summary (Not Required)**

The total maximum CCA is calculated as follows:

New Class 1	\$ 72,000
Old Class 1	Nil
Class 8	96,835
Class 10	Nil
Class 10.1	13,500
Class 13	37,500
Class 14.1	Nil
<hr/>	
Total CCA	\$219,835
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## CHAPTER SIX SOLUTIONS

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### Solution to Assignment Problem Six - 1

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The results for the 2 years would be as follows:

	2019	2020
Cash Collections (\$185,000 - \$65,000)	\$120,000	
Cash Collections (\$240,000 - \$50,000)		\$190,000
Ending Receivables	65,000	50,000
Reserve For Doubtful Debts:		
Add Prior Year Reserve	Nil	5,000
Deduct Current Year Reserve	( 5,000)	( 3,500)
Deduct Actual Write-Offs	Nil	( 5,500)
Advances From Customers	23,000	13,400
Reserve For Undelivered Merchandise:		
Add Prior Year Reserve	Nil	23,000
Deduct Current Year Reserve	( 23,000)	( 13,400)
Gross Profit On Unused Materials Sale	10,000	Nil
Reserve For Unpaid Amounts:		
Add Prior Year Reserve		4,000
Deduct Current Year Reserve*		
{[\$10,000][(\$50,000 - \$30,000) ÷ \$50,000]}	( 4,000)	
{[\$10,000][(\$50,000 - \$40,000) ÷ \$50,000]}		( 2,000)
Net Effect	\$186,000	\$261,000

\*As some of the proceeds on the sale of unused landscaping materials are not due until two years after the date of the sale, a reserve for unpaid amounts can be deducted. The three year time limit is not relevant as the balance is completely paid off within that time period.

## Solution to Assignment Problem Six - 2

### Part A

**Ford Focus** The tax consequences resulting from the sale of the Ford Focus can be calculated as follows:

January 1, 2019 UCC	\$20,060
Disposition - Lesser Of:	
Capital Cost = \$23,600	
Proceeds Of Disposition = \$18,200	( 18,200)
<hr/>	
Ending Balance With No Remaining Assets In Class	\$ 1,860
Terminal Loss	( 1,860)
<hr/>	
UCC - December 31, 2019	Nil
<hr/>	

Because of its price, the new Mercedes will have to be allocated to a separate Class 10.1. This means that the Ford Focus was the last asset in Class 10. Given this, the balance of \$1,860 will be deducted from income as a terminal loss.

As no balance remains in this Class, there will be no Class 10 CCA for 2019.

**Mercedes E-Class Sedan** The maximum CCA deduction on the Mercedes would be calculated as follows:

Capital Cost (Limited To \$30,000)	\$30,000
Accll Adjustment [(50%)(30,000)]	15,000
<hr/>	
CCA Base	\$45,000
Rate	30%
<hr/>	
Maximum CCA	\$13,500
<hr/>	

The net effect on income due to the two automobiles would be as follows:

Terminal Loss	(\$ 1,860)
CCA	( 13,500)
Operating Costs (Fully Deductible)	( 17,460)
<hr/>	
Total Deductible Costs	(\$32,820)
<hr/>	

### Part B

Because the Ford Focus was used primarily (more than 50 percent) for employment purposes, it is eligible for the reduced standby charge and the alternative operating cost benefit calculation. The minimum benefit on this vehicle would be calculated as follows:

Standby Charge:	
[(2%)(23,600)(4)(6,668 ÷ 6,668*)]	\$1,888
Operating Cost Benefit - Lesser Of:	
• [(\$1,888)(1/2)] = \$944	
• [(13,000)(0.28)] = \$3,640	944
<hr/>	
Ford Focus - Minimum Total Benefit	\$2,832
<hr/>	

\*[(4)(1,667)] Also note that, as the personal use was greater than 1,667 kilometers per month, the numerator is equal to the denominator.

Less than one-half of the Mercedes' mileage was for employment related activities. Given this, there is no reduction of the standby charge and no alternative calculation of the operating cost benefit available. The minimum total benefit is calculated as follows:

Standby Charge [(2%)(\\$52,000)(8)]	\$ 8,320
Operating Cost Benefit [(23,000)(\\$0.28)]	6,440
Mercedes Sedan - Minimum Total Benefit	\$14,760

The total benefit on the two vehicles would be calculated as follows:

Ford Focus	\$ 2,832
Mercedes Sedan	14,760
Total Taxable Benefit	\$17,592

## Solution to Assignment Problem Six - 3

### Analysis

The choice between the two alternatives will be based on the comparative tax flows of the two alternatives. The relevant calculations are provided in the sections which follow.

### Employer Provides Automobile

If Jordan elects to have the employer provide the BMW, he will have a taxable benefit in each year. Since his employment related mileage is greater than 50 percent, he is eligible for the reduced standby charge and the alternative operating cost benefit calculation. The after tax consequence of this choice would be as follows:

Standby Charge (Reduced)	
[(2%)(12)(\$125,000)(18,000 ÷ 20,004*)]	\$26,995
Operating Cost Benefit - Lesser Of:	
• [(1/2)(\$26,995)] = \$13,498	
• [(\$0.28)(18,000)] = \$5,040	5,040
Total Automobile Benefit	\$32,035
Marginal Tax Rate	50%
Annual Increase In Tax	\$16,018

\*[(12)(1,667)]

### Jordan Buys the Automobile

The pre-tax cash inflows (outflows) associated with this alternative are as follows:

	2019	2020	2021
Loan Proceeds	\$125,000	N/A	N/A
Automobile Purchase	( 125,000)	N/A	N/A
Allowance Received [(12)(\$2,000)]	24,000	\$24,000	\$ 24,000
Loan Repayment	N/A	N/A	( 125,000)
Proceeds From Sale Of Car	N/A	N/A	52,000
Operating Costs [(\$0.32)(65,000)]	( 20,800)	( 20,800)	( 20,800)
Pre-Tax Cash Inflows (Outflows)	\$ 3,200	\$ 3,200	(\$ 69,800)

The tax savings (costs) associated with this alternative are as follows:

	2019	2020	2021
Operating Costs [(\$0.32)(65,000)]	(\$20,800)	(\$20,800)	(\$20,800)
CCA (Note 1)			
[(150%)(30%)(30,000)]	( 13,500)		
[(30%)(16,500)]		( 4,950)	
[(1/2)(30%)(11,550)]			( 1,733)
Automobile Costs Before Imputed Interest	(\$34,300)	(\$25,750)	(\$22,533)
Employment Usage (47,000 ÷ 65,000)	72.3%	72.3%	72.3%
Deductible Amount	(\$24,799)	(\$18,617)	(\$16,291)
Allowance	24,000	24,000	24,000
Net Taxable Benefit On Loan (Note 2)	692	692	692
Inclusion In Taxable Income	(\$ 107)	\$ 6,075	\$ 8,401
Marginal Tax Rate	50%	50%	50%
Increase (Decrease) In Tax	(\$ 54)	\$ 3,038	\$ 4,201

**Note 1** As a Class 10.1 asset is involved, the CCA base is limited to \$30,000. When the asset is sold, no recapture or terminal loss can be recognized on Class 10.1. However, one-half year CCA can be deducted in the year of disposal.

**Note 2** There will be a taxable benefit on the loan of \$2,500 in interest per year [(2%)(\\$125,000)]. However, ITA 80.5 deems such interest to be interest paid. As it is less than the limit of \$10 of car loan interest per day, this would provide an interest deduction of \$1,808 [(\$2,500)(47,000 ÷ 65,000)], based on the portion of the vehicle mileage that is used for employment related purposes. As a result, the net benefit would be \$692 (\$2,500 - \$1,808).

The net after tax cash outflow would be calculated as follows:

	2019	2020	2021
Pre-Tax Cash Inflow (Outflow)	\$3,200	\$3,200	(\$69,800)
Tax Inflow (Outflow)	54	( 3,038)	( 4,201)
Net Cash Inflow (Outflow)	\$3,254	\$ 162	(\$74,001)

### **Best Alternative**

A comparison of the two alternatives is as follows:

Net Cash Inflows (Outflows)	2019	2020	2021	Total
Employer Provided	(\$16,018)	(\$16,018)	(\$16,018)	(\$48,054)
Employee Purchase	3,254	162	( 74,001)	( 70,585)

Without consideration of the time value of money, the employer provided alternative is clearly preferable. The total cash outflow under this approach is \$48,054 as compared to \$70,585 under the employee purchase alternative.

### **Other Considerations**

The preceding calculations could be quite different if any of the required estimates prove not to be accurate, such as if the actual number of kilometers driven, or personal kilometers driven was to be different from the estimated, or if the resale value was not actually \$52,000. However, given the much lower cash outflow under the employer provided alternative, it is unlikely that the conclusion would change.

## Solution to Assignment Problem Six - 4

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### **Valuation Basis**

For tax purposes, the Company can use either fair market value or lower of cost and market. The inventory rules under GAAP are more restrictive as inventories must be measured using the lower of cost and net realizable value.

### **Market Determination - Two Possible Values**

For tax purposes, the Company can measure market using either replacement cost or net realizable value. These values would be as follows:

Replacement Cost [(\$10.50)(22,000)]	\$231,000
Net Realizable Value [(\$11.75)(22,000)]	\$258,500

While it is not an acceptable practice under GAAP, the CRA will accept the use of market values, without regard to their relationship to cost.

### **Cost Determination**

In the determination of cost, taxpayers are permitted to use specific identification (this would not appear to be practical here), a First In, First Out (FIFO) assumption, or Average Cost.

Using the First In, First Out method, the appropriate value for the ending inventory would be determined as follows:

17,000 Units At \$12.50	\$212,500
5,000 Units At \$12.00	60,000
22,000 Units At FIFO Cost	\$272,500

Based on average cost, the ending inventory value would be calculated as follows:

Number Of Units	22,000
Average Cost [(\$1,554,500 ÷ 136,000)]	11.43
22,000 Units At Average Cost	\$251,460

### **Lower Of Cost And Market - Four Possible Values**

For tax purposes, the possible values here would be as follows:

Lower Of Replacement Cost And FIFO Cost	\$231,000
Lower Of Replacement Cost And Average Cost	231,000
Lower Of Net Realizable Value And FIFO Cost	258,500
Lower Of Net Realizable Value And Average Cost	251,460

For accounting purposes, only the last two values would be acceptable.

## Solution to Assignment Problem Six - 5

The required calculations would be as follows:

Net Business Income For Tax Purposes (Given)	\$613,300
Item 1 - Business Meals And Entertainment (Note 1)	( 8,450)
Item 2 - U.S. Advertising (Note 2)	( 7,420)
Item 3 - Damage To Flowers (Note 3)	Nil
Item 4 - Payments To Customs Official (Note 4)	( 19,460)
Item 5 - Charitable Donations (Note 5)	( 6,300)
Item 6 - Ending Inventories (Note 6)	( 13,150)
Item 7 - CCA Adjustment (Note 7)	51,400
Item 7 - Amortization Adjustment (Note 7)	( 46,350)
Item 8 - Uniforms (Note 8)	Nil
Item 9 - Delivery Vehicle - Terminal Loss (Note 9)	4,155
Item 9 - Delivery Vehicle - Accounting Loss (Note 9)	( 10,200)
Item 10 - Landscaping Costs (Note 10)	15,200
Item 11 - Class 8 Sale (Note 11)	3,000
<b>GAAP Based Net Income</b>	<b>\$575,725</b>

**Note 1** The \$8,450 that was deducted for tax purposes would be one-half of the total of \$16,900. Under GAAP, the remaining \$8,450 can also be deducted.

**Note 2** Foreign television advertising that is directed at the Canadian market cannot be deducted for tax purposes. However, they can be deducted under GAAP, thereby decreasing GAAP income for \$7,420.

**Note 3** The costs of this damage was deducted for tax purposes. As it would also be deductible under GAAP, no adjustment is required.

**Note 4** Although the payments are illegal and non-deductible for tax purposes, GAAP would require their deduction. Given this, the \$19,460 is deducted in order to convert net business income for tax purposes to GAAP based income.

**Note 5** While charitable contributions cannot be deducted in determining net business income for tax purposes, they can be deducted under GAAP.

**Note 6** While valuation of inventories at market value is acceptable for tax purposes, GAAP requires the use of lower-of-cost-or-market. Given this, GAAP based ending inventories must be reduced by \$13,150 (\$86,300 - \$73,150). This would increase GAAP based cost of sales and decrease GAAP based Net Income by \$13,150, so it must be deducted.

**Note 7** To calculate GAAP based income, CCA must be added back and amortization must be deducted. The result is a net adjustment of \$5,050 (\$51,400 - \$46,350)

**Note 8** The issue here is whether the cost of the uniforms was directed towards producing income. The fact that the full name of his business was not on the uniforms might suggest no. However, his business likely benefits even from the initials and from flowers purchased for the people hospitalized due to injuries during the games. Given this, he has justification to deduct this amount for tax purposes. As it would also be deducted under GAAP, no adjustment is required.

**Note 9** For tax purposes, there would have been a terminal loss of \$4,155 (\$8,455 - \$4,300). Under GAAP, the loss would have been \$10,200 (\$14,500 - \$4,300). This will require a net adjustment of \$6,045 (\$10,200 - \$4,155) in the conversion of tax income to GAAP income.

**Note 10** While landscaping costs can be deducted for tax purposes, if they have a life that extends beyond the current year, they must be treated as an asset under GAAP.

**Note 11** For tax purposes, the \$21,300 proceeds of disposition would be subtracted from Class 8. As the proceeds of disposition were less than the capital cost, there are still assets in the Class, as well as a positive balance in the Class at the end of the year, there are no tax consequences resulting from the disposition. However, under GAAP, a gain of \$3,000 ( $\$21,300 - \$18,300$ ) would have been recognized.

## Solution to Assignment Problem Six - 6

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### Part A

As covered in this Chapter 6, ITA 12(1)(l) requires inclusion of business income from a partnership. As explained in more detail in Chapter 18, Partnerships, each partner's share of partnership profits is considered personal income of each partner. The profit is calculated as though the partnership was an individual resident of Canada. Once determined, it is allocated as per the partnership agreement, with the allocated amount being included in the individual tax returns of each partner.

### Part B

The basic rules of ITA 249.1(1) require that, in general, a partnership with members who are individuals use a December 31 fiscal year end. While ITA 249.1(4) allows a partnership to elect a fiscal year end other than December 31, this election requires complex adjustments for Additional Business Income that may or may not be worthwhile.

### Part C

This question requires an analysis of whether the arrangement with the outside architects is one of employment. This material is discussed in Chapter 3 which covers employment income. Detailed guidance can be found in the CRA Guide titled "Employee Or Self-Employed?" (RC4110).

If the outside architects are considered employees, source deductions will be required. In making this decision, the overriding consideration is the intent of the involved parties. Factors that can be considered in determining this intent include the following:

**Control** It does not appear that the partnership will exercise a significant amount of control over the outside architects on how and when the work will be done. The outside architects would be free to accept or reject work from the partnership and work for others.

**Ownership Of Tools And Equipment** Depending on the nature of the work done, the projects would likely not require much in the way of tools or equipment. Any laptop, computer or drafting table used in doing the work would undoubtedly be owned by the outside architects. Although not stated in the problem, it does not appear that the outside architect would be working in space provided by Richmond Consultants.

**Ability To Subcontract Or Hire Assistants** It is not clear whether the outside architects would have the right to subcontract or hire assistants. Determining this could be important to the analysis.

**Financial Risk** Since the work is done for a set fee and related expenses are reimbursed, there is no financial risk for the outside architects.

**Responsibility For Investment And Management** It would appear that the outside architects are responsible for any management of the projects that is required.

**Opportunity For Profit** Since the work is done for a set fee, the outside architect cannot increase the proceeds and hence the profit from a project. Since expenses are reimbursed, decreasing expenses would not increase profit from a project. As a result, it does not appear that a profit could arise.

In addition to these factors, the contracts would be for a specific project, not work as part of an ongoing relationship.

This analysis would suggest that the arrangements with the outside architects are contracts for service, not contracts of employment. Given this, source deductions would not be required.

## Solution to Assignment Problem Six - 7

Karla's minimum net business income can be calculated as follows:

**Karla Sandone**  
**Statement Of Business Income**  
**For Year Ending December 31, 2019**

Total Revenue		\$285,800
Vehicle Operating Costs		
[\$(7,900)(34,000 ÷ 35,000)]	(\$ 7,674)	
Building Operating Costs	( 31,300)	
Payments To Assistants (Note 1)	( 51,100)	
Office And Photographic Supplies	( 11,600)	
Miscellaneous Office Costs	( 8,400)	
Pet Toys And Video Props	( 2,700)	
Premium Pet Food And Drinks	( 3,000)	
Business Meals [(50%)(10,500)]	( 5,250)	
CCA (Note 2)	( 102,498)	( 223,522)
Net Business Income		<u>\$ 62,278</u>

**Note 1** There is no indication that the amount paid to her son is unreasonable given his responsibilities, so the full amount is deductible.

**Note 2** The total CCA deductible would be as follows:

Class 1 [(6%)(230,712)]	\$13,843
Class 8 (Calculation Follows)	28,900
Class 50 [(150%)(55%)(20,750)]	17,119
Class 12 [(1/2)(100%)(3,480)]	1,740
Class 10.1 (Calculation Follows)	3,825
Class 10 [(150%)(30%)(80,000)(34,000 ÷ 35,000)]	34,971
Class 14.1 [(150%)(5%)(28,000)]	2,100
Total CCA	<u>\$102,498</u>

**Class 1** As the building is used 100 percent for non-residential purposes, it is eligible for the enhanced rate of 6 percent.

**Class 8** The required calculations are as follows:

Opening Balance		\$25,100
Additions	\$85,000	
Disposal - Lesser Of:		
• Proceeds = [(20%)(27,000)] = \$5,400		
• Cost = \$27,000	( 5,400)	79,600
AccII Adjustment [(50%)(79,600)]		39,800
CCA Base		\$144,500
Rate		20%
Class 8 CCA		<u>\$ 28,900</u>

**Class 10.1** As the BMW cost over \$30,000, it was allocated to a separate Class 10.1. While neither terminal losses nor recapture of CCA can be recognized on the disposition of the BMW, Karla will be allowed to take one-half year's CCA. This amount would be \$3,825 [(1/2)(30%)(25,500)].

## Solution to Assignment Problem Six - 8

### Part A

Under ITA 18(12), the following conditions must be satisfied in order for expenses related to work space in a self-contained domestic establishment to be deductible:

- the work space is either the individual's principal place of business; or
- the work space is used exclusively for the purpose of earning income from business and is used on a regular and continuous basis for meeting clients, customers, or patients of the individual in respect of the business.

With respect to Olin's mail order business, the allocated space in his home would appear to be his principal place of business. This means that he would be able to deduct work space in home costs in determining his net business income.

### Part B

The calculation of the minimum net business income to be reported in Olin's personal tax return is as follows:

Revenues		\$233,000
Expenses Other Than Home Work Space Costs:		
Cost Of Merchandise Sold (Note 1)	(\$99,687)	
Packaging Materials	( 4,206)	
Shipping Costs	( 8,354)	
Office Supplies	( 3,210)	
Telephone	( 862)	
Advertising	( 6,438)	
Insurance	( 423)	
Cleaning Services	( 3,250)	
Meals And Entertainment (Note 2)	( 1,225)	
Credit Card Fees	( 2,300)	
Reserve For Doubtful Debts	( 1,450)	
CCA (Note 3)	( 12,378)	( 143,783)
Income Before Home Work Space Costs		\$89,217
Less: Home Work Space Costs (Note 4)		( 9,199)
Net Business Income		\$ 80,018

**Note 1** The cost of merchandise sold is \$99,687 (\$116,014 - \$16,327)

**Note 2** The deductible amount is \$1,225 [(50%)(2,450)]

**Note 3** Maximum CCA amounts on the assets of the business (not including CCA on the house) for the short fiscal year would be calculated as follows (alternative calculations shown in the two columns):

	100%	Short Fiscal Year (306/365)
Class 8 [(\$42,000)(150%)(20%)]	\$12,600	\$10,563
Class 50 [(\$1,940 + \$400)(150%)(55%)]	1,931	1,619
Class 12 [(\$467)(1/2)(100%)]	234	196
Total	\$ 14,765	
Short Fiscal Year Factor	306/365	
Maximum CCA	\$12,378	\$ 12,378

**Note 4** The work space in home costs would be calculated as follows:

Utilities For Home (Heat, Light, And Water)	\$ 2,650
Mortgage Interest Paid	14,600
House Insurance	1,300
Property Taxes	7,005
Repairs And Maintenance (Note 5)	1,200
Total	\$26,755
Class 1 CCA [(\$467,000 - \$130,000 + \$12,200)(150%)(4%)]	20,952
Total Costs For The Home	\$47,707
Percentage Of Floor Space	23%
Subtotal	\$ 10,973
Short Fiscal Year Factor	306/365
Deductible Home Work Space Costs	\$ 9,199

**Note 5** The \$12,200 cost of replacing the aging cedar siding is clearly an improvement in the property. As such, it must be added to the capital cost of the building rather than deducted during the current period.

### Part C

There are three issues that should be discussed with Olin.

- As this problem asks for “minimum” net business income, CCA must be deducted on Olin's home. The problem with this is that, if he takes CCA, it could jeopardize the principal residence exemption on this property, resulting in the payment of taxes on a portion of the taxable capital gain that might arise on any future sale of the property, assuming real estate prices are increasing. This is discussed in more detail in Chapter 8.
- The fact that his parents are not accepting payment for their work may not be advantageous for tax purposes when the family unit is considered. Information on the marginal tax rate for each individual, as well as projected net business income is required to analyse this situation. For example, if Olin will be in the top marginal bracket in the future and his parents will be in the lowest bracket, it could be good tax planning for Olin to pay them for their work. However, family dynamics would also have to be considered.
- Although it is not relevant for this year, Olin should be aware that the deduction of work space in home costs cannot be used to create a loss in the future. However, any amount not deductible because it is greater than his income can be deducted in any subsequent year provided there is sufficient income from the same business in that year. This provides for an unlimited carry forward of unused work space in home costs (see IT-514, *Work Space in Home Expenses*).

## Solution to Assignment Problem Six - 9

The minimum Net Income For Tax Purposes would be calculated as follows (the related item number in the problem precedes the adjustment):

Accounting Income		\$ 576,183
Add:		
I/S Total Income Tax Expense (\$182,000 + \$35,000)	\$217,000	
I/S Amortization Expense	550,000	
1 Accounting Bad Debt Expense (Note 1)	16,750	
1 2018 Reserve For Bad Debts	13,000	
2 Charitable Donations	27,000	
2 Bonus Payments (Fully Deductible)	Nil	
2 Golf Club Membership Dues (\$12,000 + \$2,400)	14,400	
2 Business Meals And Entertainment [(1/2)(\$32,000)]	16,000	
2 Personal Meal Costs	5,000	
2 Staff BBQ (Fully Deductible)	Nil	
2 Production Sponsorships (Deductible)	Nil	
2 Advertising To U.S. Market (Deductible)	Nil	
2 Software Purchases (Capital Costs - Class 12 and 50)	38,000	
2 Costs Related To Amending Articles Of Incorporation (Note 4)	6,000	
2 Thailand Convention Expenses (Note 2)	17,000	
3 Non-Deductible Penalty And Interest Expense	2,000	
3 Other Interest Expense (Deductible)	Nil	
4 Non-Deductible Travel Costs (Note 3)	1,570	
6 Net Accounting Loss On Franchise	17,000	
8 Taxable Capital Gain On Sale Of Shares (Note 5)	76,354	1,017,074
Deduct:		
1 Actual Bad Debt Write-Offs For 2019 (Note 1)	(\$ 11,750)	
1 2019 Reserve For Bad Debts (Note 1)	( 15,000)	
5 Maximum CCA (Note 6)	( 251,093)	
5 Terminal Loss (Note 6)	( 5,000)	
7 Landscaping Costs Capitalized For Accounting Purposes	( 35,000)	( 317,843)
Net Income For Tax Purposes		\$1,275,414

**Note 1** While this would be unusual in practice, the accounting figure for bad debt expense is different from the tax figure. Given this, we have added back the accounting deduction of \$16,750, and included the appropriate amounts for tax purposes.

**Note 2** It is likely that the CRA would argue that a convention in Thailand is not consistent with the territorial scope of the corporation. However, an argument could be made that, given it deals with costume design and is an annual convention, it should be deductible.

**Note 3** Since the kilometer-based allowances were non-taxable, the deductible mileage is \$0.58 for the first 5,000 kilometers per employee and \$0.52 for additional kilometers. The non-deductible automobile expenses are calculated as follows:

Actual mileage paid:		
[((\$0.62)(7 employees @ 4,000) + (1 @ 7,500))]		\$22,010
Deductible portion:		
{[((\$0.58)(7 @ 4,000 + 1 @ 5,000))] + [\$0.52 @ 2,500]}		( 20,440)
Non-deductible portion		\$ 1,570

**Note 4** The cost of amending the articles of incorporation would be added to Class 14.1 (see CCA calculations).

**Note 5** The capital gain was credited to retained earnings in error. It is necessary to add the taxable portion of \$76,354 [(1/2)(\$152,708)] to income in order to calculate net income for tax purposes.

**Note 6** The CCA, and terminal loss for the year ending December 31, 2019, can be calculated as follows:

Class 1 - Existing Building

Opening UCC	\$650,000
Rate (Class 1)	4%
Class 1 CCA	\$ 26,000

Class 1 - New Building - Separate Class

Opening UCC	Nil
Addition	\$475,000
Accll Adjustment [(50%)(\$475,000)]	237,500
CCA Base	\$712,500
Rate (Class 1 > 90% used for manufacturing)	10%
Class 1 CCA	\$ 71,250

Class 6 - Fence

Opening UCC	Nil
Addition	\$52,000
Accll Adjustment [(50%)(\$52,000)]	26,000
CCA Base	\$78,000
Rate (Class 6)	10%
Class 6 CCA	\$ 7,800

Class 8 - Office and other Equipment

Opening UCC	\$95,000
Addition	1,200
Disposition - Lesser Of:	
Capital Cost = \$5,000	
Proceeds Of Disposition = \$3,500	( 3,500)
Accll Adjustment	Nil
CCA Base	\$92,700
Rate (Class 8)	20%
Class 8 CCA	\$18,540

Class 10.1 - Existing Automobile

Opening UCC And CCA Base	\$17,850
Rate (Class 10.1)	30%
Class 10.1 Full CCA	\$ 5,355
Claim (50 Percent In Year Of Disposition)	50%
Class 10.1 CCA On Sold Automobile	\$ 2,678

## Class 10.1 - Replacement Automobile

Opening UCC	Nil
Addition, Limited To \$30,000	\$30,000
AcclI Adjustment [(50%)(\$30,000)]	15,000
CCA Base	\$45,000
Rate (Class 10.1)	30%
Class 10.1 CCA	\$13,500

## Class 12 - Applications Software

Opening UCC	Nil
Addition	\$13,000
First Year One-Half Rule (No AcclI)	( 6,500)
CCA Base	\$ 6,500
Rate (Class 12)	100%
Class 12 CCA	\$ 6,500

## Class 14 - Limited Life Intangibles

Opening UCC	\$68,000
Disposition - Lesser Of:	
Capital Cost = \$95,000	
Proceeds Of Disposition = \$63,000	( 63,000)
Positive Ending Balance With No Assets = Terminal Loss	\$ 5,000

## Class 14.1 - Goodwill and Unlimited Life Intangibles

Opening UCC	Nil
Addition (Amendment Of Incorporation Articles)	\$6,000
AcclI Adjustment [(50%)(\$6,000)]	3,000
CCA Base	\$9,000
Rate (Class 14.1)	5%
Class 14.1 CCA	\$ 450

## Class 44 - Limited Life Patent

Opening UCC And CCA Base	\$65,000
Rate (Class 44)	25%
Class 44 CCA	\$16,250

## Class 50 - Systems Software

Opening UCC	Nil
Addition	\$25,000
AcclI Adjustment [(50%)(\$25,000)]	12,500
CCA Base	\$37,500
Rate (Class 50)	55%
Class 50 CCA	\$20,625

## Class 53 - Manufacturing and Processing Equipment

Opening UCC	\$135,000
Rate (Class 53)	50%
<hr/>	
Class 53 CCA	\$ 67,500
<hr/>	

**Summary of CCA**

Class 1 CCA - Existing Building	\$ 26,000
Class 1 CCA - New Building, separate class	71,250
Class 6 CCA	7,800
Class 8 CCA	18,540
Class 10.1 CCA (\$2,678 + \$13,500)	16,178
Class 12 CCA	6,500
Class 14 CCA (Terminal Loss)	Nil
Class 14.1 CCA	450
Class 44 CCA	16,250
Class 50 CCA	20,625
Class 53 CCA	67,500
<hr/>	
Total CCA	\$251,093
<hr/>	
Terminal Loss - Class 14	\$ 5,000
<hr/>	

**Factors Not Affecting Solution (Not Required)**

- The bonuses paid June 15, 2020 are fully deductible as they were paid within 180 days of the end of the year in which they were accrued.
- The cost of the annual barbeque for all staff is fully deductible.
- Sponsorship of various themed theater productions that use Angie's costumes is fully deductible as an advertising expense.
- Advertising in a U.S. theater magazine to promote the business to U.S. customers is a deductible cost.
- The interest expense amounts related to operations and late payment of municipal property taxes are fully deductible.

## Solution to Assignment Problem Six - 10

### Part A - Justification For Deductibility

In order to establish if any dog-related expenses are deductible, it must first be determined if the dog was acquired for the purpose of producing income from Lorna's practice. It appears quite clear from the problem that Sigmund was purchased in order to increase Lorna's revenues.

Since Sigmund was legitimately acquired in connection with a business, the expenses related to his maintenance and training (food, vet bills, etc.) would be deductible in full. It is possible that the CRA would claim that there is a personal benefit associated with the ownership of Sigmund. To the extent that this claim could be enforced, some part of the deductions for Sigmund would be lost.

However, since the original intent was to acquire a dog to be specially trained to be used as a therapy dog, there is a strong case for the full deduction of the costs associated with Sigmund.

There would be no requirement to show how much income was actually attributable to Sigmund's efforts, only that a connection is made to the income earning process. With that connection established, there would be no need to allocate expenses based on when Sigmund actually began to work.

### Part B - Calculation Of Deductible Expenses

For the year ending December 31, 2019, Lorna would be able to deduct the following expenditures:

Food, including puppy vitamins and supplements	\$ 2,600
Veterinary fees	800
Therapy dog training course fees	1,400
Dog walking fees paid to Alec (Note 1)	3,280
Car lease for SUV (Note 2)	3,095
Operating expenses for SUV	2,950
Purchase of paw protectors (Note 3)	140
Class 8 CCA (Note 3)	366
<b>Total Deductions</b>	<b>\$14,631</b>

**Note 1** Since Alec is charging Lorna the fair market rate for the dog walking service, the fee would be deductible.

**Note 2** The amount that Lorna can deduct for the SUV lease payments is limited to \$3,095, the least of:

- \$5,700  $[(\$950)(6)]$ ;
- \$4,907  $[(\$800)(184/30)]$ ; and
- \$3,095  $\{[\$5,700][\$30,000 \div (85\%)(\$65,000)]\}$ .

**Note 3** Any clothing that would normally be replaced within a year would be deductible. However, clothing expected to last for longer than a year would be included in Class 8 as would the dog crate. As a result, the Class 8 CCA would be equal to \$366  $[(\$820 + \$400)(150\%)(20\%)]$ .

### Part C - Sale Of Sigmund

As stated in the problem, Sigmund's purchase cost is a capital asset that cannot be claimed as depreciable property. As a result, the gain on Sigmund's sale is capital in nature and the taxable capital gain is equal to \$3,250  $[(1/2)(\$8,700 - \$200 - \$2,000)]$ .

Assuming Lorna has no other Class 8 assets, the UCC of Class 8 at January 1, 2020 would be equal to \$854  $(\$1,220 - \$366)$ . Since she received \$200 for these items, Lorna has a terminal loss of \$654.

The net increase in Lorna's Net Income For Tax Purposes for 2020 would equal \$2,596 (\$3,250 - \$654).

**Note To Instructor**

Since the question of whether a therapy dog is a depreciable asset is not answered specifically in the textbook, the fact that it is not depreciable was stated in the problem. If you are interested in how this conclusion was reached, we offer the following analysis.

The first thing we observe is that the nature of a dog is technically that of a capital expenditure meaning that ITA 18(1)(b) prevents any deduction except to the extent permitted by ITA 20. You then observe that there is no specific deduction under ITA 20 that would recognize such an expense though there are general rules that might apply.

The first issue to resolve is whether CCA could be claimed. ITR 1102(2) sets out a few ground rules as to what definitely cannot be claimed as CCA. ITR 1102(1)(c) states that CCA cannot be deducted on a capital expenditure that was not incurred for the purpose of earning income. ITR 1102(1)(b) precludes CCA where the cost of a dog would be included in inventory. As a result, a person who breeds dogs as a business would be able to deduct the capital expenditures related to the dog breeding through a cost of goods sold inventory deduction.

So if a dog is acquired for the purpose of earning income and is not part of an inventory then a CCA deduction is not necessarily prohibited. What is needed next is a relevant CCA class.

When you search through the classes you quickly discover that there is no class that refers to animals at all. (There are special inventory rules for livestock such as cattle but as inventory only, not as deductible CCA.) This leads you to Class 8 which is commonly referred to as the catch-all class designed to pick up anything not included in some other class. When you look at the description of Class 8 you will see that paragraph (i) includes within Class 8 any tangible capital property not included in some other class, but then it lists a number of exclusions one of which is an "animal".

As a result, it must be concluded that the original cost of the therapy dog cannot be written off through CCA and is a non-depreciable capital property.

## Solution to Assignment Problem Six - 11

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The appropriate advice on each of the expenditures described in the problem would be as follows:

1. Both the insurance payments for coverage of her office and contents and for malpractice coverage would be deductible as business expenses. The life insurance premiums, unless the insurance was required to obtain financing, would not be deductible.
2. The payments to the collection agency are a legitimate cost of operating her practice and, as such, are deductible.
3. While the contributions to registered charities will qualify Dr. Sweet for a credit against Tax Payable, they cannot be deducted in the computation of Net or Taxable Income for an individual.
4. Assuming that the salary being paid to Mr. Sweet is reasonable for the services being rendered by him, it can be deducted as a business expense.
5. The convention costs related to Dr. Sweet's attendance at the convention would be deductible. In most situations, the costs associated with an accompanying spouse would not be deductible. However, since Mr. Sweet is involved in Dr. Sweet's business operation, it may be possible to demonstrate that there was a legitimate business purpose for having him attend the convention. If this demonstration can be accomplished, the expenses related to Mr. Sweet would also be deductible in these circumstances. Any deductible meal and entertainment expenditures would be subject to the 50 percent limit.
6. The membership fee of \$1,000 would not be deductible. However, the payments for court time spent with patients would be deductible, subject to the 50 percent limitation that is applicable to business meals and entertainment costs. The deduction would be \$260  $[(50\%)(40\%)(\$1,300)]$ .
7. As Dr. Sweet was involved in fighting a reassessment, the accounting and legal fees would be deductible. However, the interest resulting from late payment of taxes would not be deductible.
8. As any winnings resulting from Dr. Sweet's lottery ticket purchases would not be taxable, the cost of the lottery tickets is not deductible.

## Solution to Assignment Problem Six - 12

Carl's minimum net business income can be calculated as follows:

**Carl Pomery**  
**Statement Of Business Income**  
**For Year Ending December 31, 2019**

Revenues		
2019 Billable Hours		\$152,000
Opening Unbilled Receivables (Note 1)		28,000
Closing Unbilled Receivables (Note 1)		( 33,600)
<hr/>		
Tax Basis Revenues		\$146,400
Expenses		
Building Operating Costs	(\$ 22,000)	
Vehicle Operating Costs	( 7,200)	
Vehicle Lease Payments (Note 2)	( 5,775)	
Payments To Assistants	( 24,000)	
Miscellaneous Office Costs	( 4,500)	
Business Meals [(50%)(3,500)]	( 1,750)	
CCA (Note 3)	( 46,633)	
Terminal Loss For Class 10 (Note 4)	( 2,060)	( 113,918)
<hr/>		
Net Business Income		<u>\$ 32,482</u>

**Note 1** As Carl is a professional accountant he is eligible for the use of the billed basis of recognition. The problem requires the minimum business income so we can assume he makes the ITA 34 election to use the billed basis.

However, as noted in the text, beginning in 2018, this provision is being phased out over 5 years at the rate of 20 percent per year. This means that only \$28,000 [(80 percent of \$35,000)] of the ending 2018 balance could be deferred in that year. This amount will have to be brought back into Net Business Income in 2019.

For 2019, only \$33,600 [(60%)(56,000)] of the ending work-in-progress balance can be deferred.

**Note 2** The car leasing costs would be wholly deductible as the monthly lease charge and the manufacturer's list price are within the prescribed limits.

**Note 3** The total CCA deductible would be as follows:

Class 1 [(\$242,000)(6%)]	\$14,520
Class 8 (Calculation Follows)	22,800
Class 50 [(150%)(55%)(2,500)]	2,063
Class 12 [(\$2,200)(1/2)(100%)] (No AcclI)	1,100
Class 14.1 [(\$82,000)(150%)(5%)]	6,150
<hr/>	
Total CCA	<u>\$46,633</u>

**Class 1** As the building is used 100 percent for non-residential purposes, it is eligible for the enhanced rate of 6 percent.

**Class 8** The required calculations are as follows:

Opening Balance		\$72,000
Additions	\$46,000	
Disposal - Lesser Of:		
• Proceeds = \$18,000		
• Cost = \$23,000	( 18,000)	28,000
AccII Adjustment [(50%)(28,000)]		14,000
CCA Base		\$114,000
Rate		20%
Class 8 CCA		\$ 22,800

**Note 4** As the only vehicle used by the business was disposed of during the year, there is no CCA for Class 10. However, as there is a balance left in the Class, there would be a terminal loss calculated as follows:

UCC Of The Class At The Beginning Of The Year	\$16,660
Deduct: Dispositions During The Year - Lesser Of:	
• Capital Cost = \$19,600	
• Proceeds Of Disposition = \$14,600	( 14,600)
Ending Balance With No Remaining Assets = Terminal Loss	\$ 2,060

## Solution to Assignment Problem Six - 13

### Part A

If the ITA 22 election is not made, the tax consequences for Ms. Close would be as follows:

Add: 2018 Reserve For Doubtful Debts		\$8,000	
Deduct Capital Loss:			
Proceeds Of Disposition	\$107,000		
Adjusted Cost Base	( 120,000)		
Capital Loss	(\$ 13,000)		
Non-Deductible One-Half	6,500		( 6,500)
2019 Income Inclusion			\$1,500

If the ITA 22 election is not made, the tax consequences to Mr. Phar would be as follows:

Proceeds Of Disposition (Amount Collected)		\$100,000	
Adjusted Cost Base		( 107,000)	
Capital Loss		(\$ 7,000)	
Non-Deductible One-Half		3,500	
2019 Deduction From Income		(\$ 3,500)	

Note that, in the case of both Ms. Close and Mr. Phar, the allowable capital losses included in the preceding calculations could only be deducted against taxable capital gains. If they did not have taxable capital gains sufficient to absorb their allowable capital losses, Ms. Close would have an inclusion of \$8,000, and Mr. Phar would have no deduction or inclusion.

### Part B

If the ITA 22 election is made, the tax consequences for Ms. Close would be as follows:

Add: 2018 Reserve For Doubtful Debts		\$ 8,000	
Deduct: Business Loss (\$120,000 - \$107,000)		( 13,000)	
2019 Deduction From Income		(\$ 5,000)	

If the ITA 22 election is made, the tax consequences to Mr. Phar would be as follows:

Add: Face Value - Price Paid (\$120,000 - \$107,000)		\$13,000	
Deduct: Actual Write-Offs (\$120,000 - \$100,000)		( 20,000)	
2019 Deduction From Income		(\$ 7,000)	

As would always be the case, the use of the ITA 22 election improves the results for the vendor (Ms. Close). There is a \$5,000 deduction as compared to a \$1,500 inclusion when ITA 22 is not used.

In this case, Mr. Phar is also better off using ITA 22. He has a \$7,000 deduction as compared to a \$3,500 deduction when ITA 22 is not used. This result reflects the fact that the actual amount collected (\$100,000) was less than the estimated fair value at the time of transfer (\$107,000). If the actual proceeds had been more than \$107,000, Mr. Phar would have been better off not using the ITA 22 election.

If, for example, the proceeds were \$110,000, Mr. Phar would have had business income of \$3,000 (\$110,000 - \$107,000) if he had used ITA 22. In the absence of ITA 22, he would have had a capital gain of \$1,500 [(1/2)(\$110,000 - \$107,000)].

## Solution to Assignment Problem Six - 14

### Parts A And B - Minimum Net Income And Taxable Income

**Dorian** Dorian's net employment income would be calculated as follows:

Salary	\$ 92,500
Registered Pension Plan Contributions	( 5,600)
Automobile Benefit (Note 1)	13,200
Travel Allowance (Note 2)	Nil
Travel Costs (Note 2)	Nil
Gifts (Note 3)	400
Workspace In The Home Costs (Note 4)	( 370)
<b>Net Employment Income</b>	<b>\$100,130</b>

**Note 1** As more than 50 percent of Dorian's kilometers are employment related, he qualifies for the reduced standby charge and the alternative calculation of the operating cost benefit. Given this, the required calculations are as follows:

Standby Charge [(2%)(11)(\$40,000)(18,337 ÷ 18,337*)]	\$ 8,800
Operating Cost Benefit - Lesser Of:	
• [(1/2)(\$8,800)] = \$4,400	
• [(\$0.28)(23,000)] = \$6,440	4,400
<b>Total Benefits</b>	<b>\$13,200</b>

\*[(11)(1,667)] While Dorian's personal milage totaled 23,000 kilometers, the numerator of this reduced standby charge fraction cannot exceed the denominator.

**Note 2** Given that the \$6,600 allowance is very close to Dorian's actual expenditures, we can assume that the CRA would view the allowance as reasonable. Given this, the allowance will not be included in Dorian's employment income and, as a consequence, he cannot deduct his actual travel costs.

**Note 3** As gift certificates are considered near cash gifts, the \$400 will have to be included in Dorian's employment income. However, as the Christmas basket has a value of less than \$500, it can be excluded.

**Note 4** Of the items listed, the only cost that Dorian can base a deduction on as an employee is his outlays for utilities and maintenance. The amount would be \$370 [(20%)(\$1,850)].

Dorian's net business income would be calculated as follows:

Accounting Net Income		\$71,500
Additions:		
Amortization Expense	\$31,200	
Business Meals [(1/2)(\$11,000)]	5,500	36,700
Deductions:		
CCA (Note 5)		( 44,180)
Landscaping Costs		( 12,600)
<b>Net Business Income</b>		<b>\$51,420</b>

**Note 5** Maximum CCA is calculated as follows:

Class 1 [(6%)(\$351,000)]	\$21,060
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Class 8 Opening Balance		\$63,400
Additions	\$21,100	
Dispositions - Lesser Of		
• Capital Cost = \$18,000		
• Proceeds = \$11,300	( 11,300)	9,800
Accll Adjustment [(50%)(9,800)]		4,900
CCA Base		\$78,100
Rate		20%
Class 8 CCA		\$15,620
Class 10 [(30%)(25,000)]		\$7,500

The total would be \$44,180 (\$21,060 + \$15,620 + \$7,500).

Dorian's Net Income For Tax Purposes and Taxable Income can be calculated as follows:

Net Employment Income	\$100,130
Net Business Income	51,420
Net Income For Tax Purposes	\$151,550
Deductions	Nil
Taxable Income	\$151,550

As Dorian has no deductions from Net Income For Tax Purposes, his Taxable Income would be equal to his Net Income For Tax Purposes.

### **Part C - Tax Payable**

Dorian's federal Tax Payable would be calculated as follows:

Tax On First \$147,667		\$30,535
Tax On Next \$3,883 (\$151,550 - \$147,667) At 29 Percent		1,126
Tax Before Credits		\$31,661
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$8,200)	( 3,869)	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Transfer Of Bart's Tuition - Lesser Of:		
• \$5,000		
• \$8,700	( 5,000)	
Medical Expenses (Note 6)	( 3,151)	
Credit Base	\$28,920	
Rate	15%	( 4,338)
Charitable Donations (Note 7)		
[(15%)(200) + (29%)(3,200 - 200)]		( 900)
Federal Tax Payable		\$26,423

**Note 6** As it would appear that Gloria's liposuction surgery is purely cosmetic, it cannot be included in the base for the family's medical expenses. Given this, the base amount for medical expenses would be calculated as follows:

Dorian And Oscar (\$1,350 + \$1,250)		\$2,600
Reduced By The Lesser Of:		
• [(3%)(\$151,550)] = \$4,547		
• 2019 Threshold Amount = \$2,352		( 2,352)
Bart's Medical Expenses	\$3,125	
Reduced By Lesser Of:		
• [(3%)(\$7,400)] = 222		
• \$2,352	( 222)	2,903
Allowable Medical Costs		<u>\$3,151</u>

**Note 7** As none of his income is taxed at 33 percent, this rate will not be applicable to the calculation of the charitable donations tax credit.

## Solution to Assignment Problem Six - 15

### Part 1 - Minimum Net Income For Tax Purposes

#### Net Employment Income

Net Employment Income would be calculated as follows:

Base Salary	\$100,000
Commission Income [(2%)(\$4,800,000)]	96,000
Group Term Life Insurance Premium [(\$3)(\\$100,000 ÷ \$1,000)]	300
Sales Performance Award (Note 1)	2,700
Eligible Housing Loss [(1/2)(\\$25,000 – \$15,000)]	5,000
Stock Option Benefit [(3,000)(\\$29 – \$27)]	6,000
Interest Benefit On Employee Loan [(2%)(3,000)(\\$27)(306/365)]	1,358
Automobile Benefit	
Standby Charge [(2/3)(\\$650)(12)(4,000 ÷ 20,004)]	1,040
Operating Cost Benefit - Lesser Of (Note 3):	
• [(4,000)(\\$0.28)] = \$1,120	
• [(1/2)(1,040)] = \$520	520
RPP Contributions	( 6,200)
Salesperson Expenses (Note 3)	( 13,790)
Professional Association Dues	( 2,700)
<b>Net Employment Income</b>	<b>\$190,228</b>

**Note 1** Awards for high levels of performance are considered to be taxable benefits.

**Note 2** When an employee is required to move and the employer provides compensation for a loss on the sale of a house at the old location, it is considered a taxable benefit to the extent of one-half of the excess of the compensation over \$15,000. In this case, that would be \$5,000 [(1/2)(\\$25,000 - \$15,000)].

**Note 3** Because BA pays the car insurance, an operating cost benefit is required to be added to employment income, even though Hillary pays all of the other automobile expenses. Salesperson expenses would be calculated as follows:

Automobile expenses [(\$8,500)(38,000 ÷ 42,000)]	\$ 7,690
Meals and entertainment [(50%)(\\$5,800)]	2,900
Hotels	3,200
<b>Total Expenses (Less Than Commissions)</b>	<b>\$13,790</b>

#### Net Business Income

Net Business Income would be calculated as follows:

Accounting Net Income	\$63,000
Add:	
Accounting Amortization	5,200
Meals And Entertainment [(1/2)(\\$6,400)]	3,200
Deduct:	
CCA (Note 4)	( 19,996)
Work Space In Home Costs (Note 5)	( 4,095)
<b>Net Business Income</b>	<b>\$47,309</b>

**Note 4** The CCA would be calculated as follows:

Opening Balance Of Class 8		\$ 6,912
Additions	\$12,000	
Disposals - Lesser Of:		
• Proceeds = \$1,200		
• Cost = \$9,000	( 1,200)	10,800
Accll Adjustment [(50%)(10,800)]		5,400
CCA Base		\$23,112
Class 8 Rate		20%
<b>Class 8 CCA</b>		\$ 4,622
<b>Class 10.1 - Old Car*</b> [(\$12,495)(30%)(1/2)]		1,874
<b>Class 10.1 - New Car In Separate Class</b> [(150%)(30,000)(30%)]		13,500
<b>Total CCA</b>		<b>\$19,996</b>

\*The recapture rules do not apply to Class 10.1. Also with respect to Class 10.1, in the year of disposition, the taxpayer is entitled to claim one-half of the normal CCA on the opening class balance.

**Note 5** Work space in the home expenses would be calculated as follows:

Utilities		\$ 4,200
Property Taxes		6,500
Maintenance		2,400
Insurance		2,100
Mortgage Interest		11,500
Total House Expenses		\$26,700
Business Use Of Residence		15%
Business Use Portion Of House Expenses		\$ 4,005
Business Use Portion Of Home Internet Service [(10%)(900)]		90
<b>Work Space In The Home Expenses</b>		<b>\$ 4,095</b>

### **Taxable Capital Gains**

The taxable capital gain on the sale of the option shares would be calculated as follows:

Proceeds Of Disposition [(\$33)(2,000)]	\$66,000
Adjusted Cost Base [(\$29)(2,000)]	( 58,000)
Capital Gain	\$ 8,000
Inclusion Rate	1/2
<b>Taxable Capital Gain</b>	<b>\$ 4,000</b>

## Part 1 - Minimum Net Income For Tax Purposes

Minimum Net Income For Tax Purposes would be calculated as follows:

Net Employment Income	\$190,228
Net Business Income	47,309
Taxable Capital Gain On Shares	4,000
Interest Expense (Note 6)	( 1,358)
<u>Net Income For Tax Purposes</u>	<u>\$240,179</u>

**Note 6** As the loan was used for investment purposes, the employment income interest benefit of \$1,358, which is deemed to be interest paid (ITA 80.5) would be deductible (ITA 20(1)(c)).

## Part 2 - Minimum Taxable Income

Minimum Taxable Income would be calculated as follows:

Net Income For Tax Purposes	\$240,179
Stock Option Deduction [(1/2)((\$6,000))]	( 3,000)
<u>Taxable Income</u>	<u>\$237,179</u>

## Part 3 - Minimum Federal Tax Payable

Minimum Federal Tax Payable would be calculated as follows:

Tax On First \$210,371		\$48,719
Tax On Next \$26,808 [(33%)(237,179 - 210,371)]		8,847
<u>Tax Before Credits</u>		<u>\$57,566</u>
Tax Credits:		
Basic Personal Amount	(\$12,069)	
Eligible Dependant (Mark)	( 12,069)	
CPP Contributions	( 2,749)	
EI Premiums	( 860)	
Canada Employment	( 1,222)	
Transfer Of Tuition - Lesser Of:		
• Absolute Limit Of \$5,000		
• Actual Tuition Of \$1,800	( 1,800)	
Medical Expenses (Note 7)	( 4,848)	
<u>Subtotal</u>	<u>(\$35,617)</u>	
Rate	15%	( 5,343)
Charitable Donations (Note 8)		( 723)
<u>Federal Tax Payable</u>		<u>\$51,500</u>
Federal Taxes Deducted At Source		( 39,400)
<u>Federal Tax Owing</u>		<u>\$12,100</u>

**Note 7** The base for the medical expense credit is calculated as follows:

Premiums Paid On Dental And Health Plan		\$3,200
Mark's Orthodontic Work	\$8,000	
Employer Reimbursement (50%)	( 4,000)	4,000
<hr/>		
Total Eligible Expenses		\$7,200
Reduced By The Lesser Of:		
• $[(3\%)(\$240,179)] = \$7,205$		
• 2019 Threshold Amount = \$2,352		( 2,352)
<hr/>		
Base For Medical Expense Credit		\$4,848
<hr/> <hr/>		

**Note 8** Hillary's charitable donations tax credit would be calculated as follows:

15% Of \$200		\$ 30
33% Of The Lesser Of:		
\$2,300 - \$200 = \$2,100		
\$237,179 - \$210,371 = \$26,808		693
29% Of [\$2,300 - (\$200 + \$2,100)]		Nil
<hr/>		
Total Credit		\$723
<hr/> <hr/>		

## CHAPTER SEVEN SOLUTIONS

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### Solution to Assignment Problem Seven - 1

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**Case A**

In this situation, the proceeds exceed the borrowings. When this is the case, the loan balance can be allocated in a discretionary manner. He could allocate all of the loan balance to the \$495,000 property, with none going to the \$115,000 property. Similarly, he could allocate \$115,000 to the \$115,000 property, leaving \$320,000 for the \$495,000 property. There are, of course, many other possibilities that would be acceptable.

**Case B**

While the dividend paying securities serve as collateral for her loan, the direct use of the loan is to purchase the Bentley. As this is not an income producing asset, she cannot deduct the \$10,500 in interest.

**Case C**

Although interest to purchase a principal residence is not generally deductible, the direct use of the funds from the mortgage was to purchase income producing assets. As a result, the interest is deductible. Under ITA 20.1 (disappearing source provision), the \$260,000 balance remaining after the stock sale will be deemed to be used to produce income. Therefore, he can continue to deduct the interest until the balance is paid off.

**Case D**

When the value of the replacement property is less than the amount borrowed, the taxpayer must use a pro-rata allocation of the borrowed money. In this case, the result would be an allocation of \$51,333 [ $(\$35,000 \div \$150,000)(\$220,000)$ ] to the first property, and an allocation of \$168,667 [ $(\$115,000 \div \$150,000)(\$220,000)$ ] to the second property.

## Solution to Assignment Problem Seven - 2

**Note To Instructor** The value of the land for the properties that have been sold has been ignored in this problem to focus on the rental income issues.

### Net Rental Income

For the four properties, CCA and other information related to disposals, would be calculated as follows:

	<b>14 Mark Avenue</b>	<b>26 Hart Street</b>
January 1, 2019 UCC	\$703,250	Nil
Additions	78,750	\$1,180,000
Accll Adjustments:		
[(50%)(78,750)]	39,375	
[(50%)(1,180,000)]		590,000
CCA Base	\$821,375	\$1,770,000
Rate	5%	4%
Maximum CCA	\$ 41,069	\$ 70,800

	<b>96 Flagler Street</b>	<b>32 Barton Boulevard</b>
January 1, 2019 UCC	\$514,800	\$266,250
Dispositions - Lesser Of:		
\$570,000 Cost And \$653,000 POD	( 570,000)	
\$307,500 Cost And \$231,000 POD		( 231,000)
Subtotal	(\$ 55,200)	\$ 35,250
Recapture (Note 1)	55,200	
Terminal Loss (Note 2)		( 35,250)
CCA Base	Nil	Nil

**Note 1** As each rental property with a cost in excess of \$50,000 must be allocated to a separate CCA Class, the negative balance for the 96 Flagler Street property must be included in income as recapture.

**Note 2** As no assets remain in the separate class for 32 Barton Boulevard, the positive balance that remains can be deducted as a terminal loss.

The terminal loss for Class 8 would be calculated as follows:

January 1, 2019 UCC	\$4,498
Disposition - Lesser Of:	
• Cost = \$28,750	
• Proceeds Of Disposition = Nil	Nil
Balance With No Remaining Assets In The Class	\$4,498
Terminal Loss On Class 8 Assets	( 4,498)
CCA Base	Nil

The calculation of net rental income would be as follows:

Income (Loss) Before CCA	
26 Hart Street	\$ 5,619
32 Barton Boulevard	( 2,738)
14 Mark Avenue	10,750
96 Flagler Street	4,700
Recapture	55,200
Terminal Loss On Class 1	( 35,250)
Terminal Loss On Class 8	( 4,498)
<hr/>	
Income Before CCA	\$33,783
CCA (Note 3)	( 33,783)
<hr/>	
Net Rental Income	Nil
<hr/>	

**Note 3** Maximum available CCA is \$111,869 (\$41,069 + \$70,800). However, as CCA cannot be used to create a net rental loss, the CCA deduction is limited to \$33,783, the net rental income before CCA.

With respect to the question of the Class from which this amount will be deducted, when CCA is not maximized, the general rule is to deduct the amount taken from the Class with the lowest rate. This means that the entire \$33,783 should be deducted from Class 1.

### **Taxable Capital Gain**

While the net rental income is nil, there would be a taxable capital gain of \$41,500 [(1/2)(\$653,000 - \$570,000)] on the disposition of the 96 Flagler Street building.

Note that the building at 32 Barton Boulevard is a depreciable property and its sale cannot create a capital loss. The difference between its capital cost of \$307,500 and the proceeds of disposition of \$231,000 has been written off through CCA and the terminal loss arising from its sale.

## Solution to Assignment Problem Seven - 3

### 2018 (Pre-Accll)

The maximum CCA for 2018 would be calculated as follows:

	Class 1	Class 8
Addition	\$575,000	\$18,500
One-Half Net Additions	( 287,500)	( 9,250)
CCA Base	\$287,500	\$ 9,250
Maximum CCA:		
[(4%)(287,500)]	( 11,500)	
[(20%)(9,250)]		( 1,850)
Add: One-Half Net Additions	287,500	9,250
January 1, 2019 UCC	\$563,500	\$16,650

Net rental income for 2018 would be calculated as follows:

Rental Revenue	\$68,500
Expenses Other Than CCA	( 28,000)
Income Before CCA	\$40,500
Class 1 CCA	( 11,500)
Class 8 CCA	( 1,850)
Net Rental Income	\$27,150

Note that when an individual uses assets to produce property income (e.g., rental income), the full calendar year is considered to be the taxation year of the individual. This means that the short fiscal period rules are not applicable to Ms. Fox.

### 2019

The terminal loss for Class 8 would be calculated as follows:

January 1, 2019 UCC	\$16,650
Disposition - Lesser Of:	
• Proceeds Of Disposition = \$14,000	
• Cost = \$18,500	( 14,000)
Positive Balance With No Remaining Assets In Class	\$ 2,650
Terminal Loss	( 2,650)
January 1, 2020 UCC - Class 8	Nil

The terminal loss will be deducted from Class 8 UCC leaving a January 1, 2020 balance of nil.

The maximum CCA for 2019 would be \$22,540 [(4%)(563,500)]. However, as the deduction of CCA cannot be used to create a loss, the actual amount for the year would be limited to \$10,350 as shown in the calculation of Net Rental Income:

Rental Revenue	\$45,000
Expenses Other Than CCA And Terminal Loss	( 32,000)
Terminal Loss	( 2,650)
Income Before CCA	\$10,350
CCA (Limited To Income Before CCA)	( 10,350)
Net Rental Income	Nil

The January 1, 2020 UCC for the Class 1 building would be calculated as follows:

January 1, 2019 UCC	\$563,500
CCA Deducted	( 10,350)
<hr/>	
January 1, 2020 UCC - Class 1	\$553,150
<hr/>	

## Solution to Assignment Problem Seven - 4

### Part A

The combined tax rates for the three sisters are 22 percent (15% + 7%), 40 percent (26% + 14%), and 54 percent (33% + 21%). Given these rates, the after tax returns on the bonds would be calculated as follows:

	Cindy (22%)	Charlotte (40%)	Carol (54%)
Interest [(6%)(\$100,000)]	\$6,000	\$6,000	\$6,000
Federal/Provincial Tax Payable At 22, 40, And 54 Percent	( 1,320)	( 2,400)	( 3,240)
After Tax Return - Interest	\$4,680	\$3,600	\$2,760

### Part B

The after tax returns resulting from an investment in the common stock begins with the calculation of the federal and provincial Tax Payable:

	Cindy (22%)	Charlotte (40%)	Carol (54%)
Dividends [(\$100,000 ÷ \$50)(\$3.25)]	\$6,500	\$6,500	\$6,500
Gross Up Of 38 Percent	2,470	2,470	2,470
Taxable Dividend	\$8,970	\$8,970	\$8,970
Combined Rate (See Part A)	22%	40%	54%
Tax Before Dividend Tax Credit	\$1,973	\$3,588	\$4,844
Dividend Tax Credit [(6/11 + 25%)(\$2,470)]	( 1,965)	( 1,965)	( 1,965)
Tax Payable	\$ 8	\$1,623	\$2,879

Based on the preceding calculation of combined Tax Payable, the after tax returns on the common shares are calculated as follows:

	Cindy (22%)	Charlotte (40%)	Carol (54%)
Dividends Received	\$6,500	\$6,500	\$6,500
Tax Payable	( 8)	( 1,623)	( 2,879)
After Tax Return - Dividends	\$6,492	\$4,877	\$3,621

### Comparison

A comparison of the after tax rates of return can be made as follows:

	Cindy (22%)	Charlotte (40%)	Carol (54%)
After Tax Dividends	\$6,492	\$4,877	\$3,621
After Tax Interest	( 4,680)	( 3,600)	( 2,760)
Advantage Of Common Stock	\$1,812	\$1,277	\$ 861

### Comment

As would be expected, the common stock offers higher after tax returns for each of the three sisters. However, the shares have a greater level of risk. There is the possibility that not all of the scheduled dividends will actually be paid. In addition, the fair market value of the shares can vary which could result in proceeds of disposition that could be more or less than \$50 per share at the time of their future sale.

## Solution to Assignment Problem Seven - 5

### Analysis

The major considerations in deciding between the two alternative investment strategies are the after tax return and the certainty of the related cash flows.

**Income Trust Units** The cash flows associated with investments in trust units are not guaranteed. However, the distributions made by these trusts tend to be fairly stable and, in general, involve less risk than dividends on common shares. Your investment of \$200,000 will result in you owning 8,000 units ( $\$200,000 \div \$25$ ).

As the monthly per unit distribution includes \$0.01 as a return of capital, you will only be taxed on \$0.09 per unit of the monthly distribution. Based on this, your Tax Payable will be calculated as follows:

Taxable Income [(12)(\\$0.09)(8,000)]	\$8,640
Tax Rate (Given)	32%
<u>Tax Payable On Monthly Distributions</u>	<u>\$2,765</u>

When you sell the units at \$26 per unit, there will be additional taxes as follows:

Proceeds Of Disposition [(\\$26)(8,000)]	\$208,000
Adjusted Cost Base:	
Original Cost	\$200,000
Less Tax Free Return Of Capital	
[(12)(\\$0.01)(8,000)]	( 960)
<u>Capital Gain</u>	<u>\$ 8,960</u>
Inclusion Rate	1/2
<u>Taxable Capital Gain</u>	<u>\$ 4,480</u>
Tax Rate	32%
<u>Tax Payable On Sale Of Units</u>	<u>\$ 1,434</u>

The \$0.01 per unit return of capital included in the monthly distribution increased your capital gain for tax purposes.

Your after tax return would be calculated as follows:

Net Cash Flow From Sale Of Units	
[(8,000)(\\$26 - \\$25)]	\$ 8,000
Trust Distributions [(12)(\\$0.10)(8,000)]	9,600
<u>Pre Tax Cash Flows</u>	<u>\$17,600</u>
Total Tax Payable (\$2,765 + \$1,434)	( 4,199)
<u>After Tax Retention - Income Trust</u>	<u>\$13,401</u>

**Common Stock Purchase** If you invest the \$200,000 in the common stock, you will acquire 2,500 shares ( $\$200,000 \div \$80$ ). The anticipated taxable income from these shares for the year is calculated as follows:

Eligible Dividends [(\\$3.00)(2,500)]	\$ 7,500
Gross Up [(38%)(\\$7,500)]	2,850
<u>Taxable Capital Gain On Sale [(1/2)(2,500)(\\$85 - \\$80)]</u>	<u>6,250</u>
<u>Taxable Income</u>	<u>\$16,600</u>

Based on this figure, your Tax Payable would be calculated as follows:

Taxable Income	\$16,600
Tax Rate	32%
<hr/>	
Tax Payable Before Credits	\$5,312
Dividend Tax Credit [(6/11 + 30%)(2,850)]	( 2,410)
<hr/>	
Tax Payable	\$2,902
<hr/>	

Your after tax return would be calculated as follows:

Eligible Dividends Received	\$ 7,500
Capital Gain (100%)	12,500
<hr/>	
Pre Tax Cash Flow	\$20,000
Tax Payable	( 2,902)
<hr/>	
After Tax Retention - Common Stock	\$17,098
<hr/>	

**Conclusion**

Using your estimates for investment returns, the better investment, based purely on after tax returns, is the common stock purchase. It provides an additional \$3,697 (\$17,098 - \$13,401). However, the common stock investment involves more risk and uncertainty.

You will have to make a decision as to whether the additional \$3,697 warrants the assumption of additional risk.

## Solution to Assignment Problem Seven - 6

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Mr. Shark's minimum Net Income For Tax Purposes would be calculated as follows:

Billable Hours (Given)	\$475,000	
December 31, 2018 Unbilled		
Work In Progress (Note 1)	33,600	
December 31, 2019 Unbilled		
Work In Progress (Note 2)	( 21,000)	
Office Supplies And Office Expenses	( 56,000)	
Travel Costs	( 8,000)	
Meals And Entertainment [(1/2)(\$12,000)]	( 6,000)	
CCA - Building [(50%)(4%)(526,000)]	( 10,520)	
CCA - Class 8 [(20%)(11,059)]	( 2,212)	\$404,868
Rental Income:		
Rents Received [(6)(\$4,000)]	\$24,000	
Expenses Other Than CCA	( 14,400)	
Rental Income Before CCA	\$ 9,600	
CCA On Rental Portion Of The Building (Note 3)	( 9,600)	Nil
Investment Income:		
Eligible Dividends Received	\$18,000	
Gross Up Of 38 Percent	6,840	24,840
Net Income For Tax Purposes		\$429,708

**Note 1** As Sonny is a professional accountant he is eligible for the use of the billed basis of recognition. However, as noted in the text, beginning in 2018, this provision is being phased out over 5 years at the rate of 20 percent per year. This means that for 2018, he was only able to defer \$33,600, 80 percent of his \$42,000 of unbilled work in progress. This amount will have to be taken into income in 2019.

**Note 2** With respect to the December 31 unbilled work in progress, he can defer only \$21,000, 60 percent of the December 31 balance of \$35,000.

**Note 3** The maximum available CCA on the rental portion of the property would be \$10,520 [(50%)(4%)(526,000)]. However, because CCA cannot be used to create or increase a rental loss, the deduction is limited in this case to the \$9,600 of income before CCA.

## Solution to Assignment Problem Seven - 7

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### Taxable Income And Tax Payable

The amount of taxable income and tax payable resulting from the investments would be calculated as follows:

<b>Mutual Fund Units</b>			
Capital Gain [(1/2)(\$0.50)(4,000)]		\$ 1,000	
Eligible Dividends [(\$0.70)(4,000)]	\$ 2,800		
Gross Up [(\$2,800)(38%)]	<u>1,064</u>	3,864	
Interest Income [(\$0.20)(4,000)]		<u>800</u>	\$ 5,664
<b>Income Trust Units</b>			
Distribution [(\$0.60)(14,000)]		\$8,400	
Return Of Capital [(\$0.25)(14,000)]		<u>( 3,500)</u>	4,900
<b>Foreign Term Deposit</b>			
Foreign Interest [(SF15,000)(\$1.29)]		\$19,350	
Excess Withholding - See Note [(20% - 15%)(19,350)]		<u>( 968)</u>	18,382
<b>Public Company Shares</b>			
Eligible Dividends [(\$1.70)(3,000)]	\$ 5,100		
Gross Up [(\$5,100)(38%)]	<u>1,938</u>	\$7,038	
Taxable Capital Gain [(1/2)(3,000)(\$31.50 - \$30.00)]		<u>2,250</u>	9,288
<b>CCPC Shares</b>			
Non-Eligible Dividends [(\$3.50)(2,100)]		\$7,350	
Gross Up [(\$7,350)(15%)]		<u>1,103</u>	8,453
Taxable Income			\$46,687
Tax Rate (33% + 18%)			51%
Tax Before Credits			\$23,810
Dividend Tax Credit - Eligible Dividends [(6/11 + 32%)(1,064 + 1,938)]			( 2,598)
Dividend Tax Credit - Non-Eligible Dividends [(9/13 + 20%)(1,103)]			( 984)
Foreign Tax Credit [(15%)(19,350)] - See Note			( 2,903)
Tax Payable			<u>\$17,325</u>

**Note - Foreign Source Property Income** As required, 100 percent of the foreign interest is included in Net Income For Tax Purposes. However, for individuals, the credit against Tax Payable that is provided under ITA 126(1) is limited to a maximum of 15 percent of the foreign source non-business income. Since the withheld amount exceeds 15 percent, the excess is deducted and does not qualify for treatment as a foreign tax credit.

**Adjusted Cost Base - Benson Small Cap Mutual Fund**

The investment of the \$5,600 [(\$1.40)(4,000)] distribution at \$16.50 per unit will result in an additional 339.39 ( $\$5,600 \div \$16.50$ ) units, for a total of 4,339.39 units. The total adjusted cost base of these units would be \$65,600 [(4,000)(\$15) + \$5,600]. Given this, the adjusted cost base per unit would be calculated as follows:

$$\$65,600 \div 4,339.39 = \$15.12$$

**Adjusted Cost Base - Canfor Properties Income Trust**

The investment of the \$8,400 [(\$0.60)(14,000)] distribution will result in an additional 1,244.44 ( $\$8,400 \div \$6.75$ ) units, for a total of 15,244.44 (14,000 + 1,244.44) units. The adjusted cost base of all of the units would be calculated as follows:

Original Units [(\$6.00)(14,000)]	\$84,000
Reinvestment In New Shares [(\$0.60)(14,000)]	8,400
Return Of Capital [(\$0.25)(14,000)]	( 3,500)
<u>Total Adjusted Cost Base</u>	<u>\$88,900</u>

Based on this, the adjusted cost base per unit would be calculated as follows:

$$\$88,900 \div 15,244.44 = \$5.83$$

## Solution to Assignment Problem Seven - 8

### Employment Income

Carl's net employment income would be calculated as follows:

Gross Wages	\$62,000
RPP Contributions	( 3,125)
Union Dues	( 572)
<b>Net Employment Income</b>	<b>\$58,303</b>

### Property Income

Carl's property income would be calculated as follows:

Eligible Dividends Received	\$11,700
Gross Up Of Eligible Dividends (38%)	4,446
Non-Eligible Dividends Received	3,250
Gross Up Of Non-Eligible Dividends (15%)	488
Foreign Dividends Before Withholding (\$10,625 ÷ 85%)	12,500
Interest	2,843
<b>Property Income</b>	<b>\$35,227</b>

### Net Business Income

Carl's net business income would be calculated as follows:

Net Cash Flow	\$123,500
Principal Payments On Car Loan (\$13,200 - \$4,920)	8,280
Non-Deductible Interest [(\$4,920 - (365)(\$10 Daily Maximum)]	1,270
December 31 Receivables	17,350
January 1 Billed Receivables	( 13,400)
December 31 Work In Process (Note 1)	21,250
January 1 Work In Process	( 17,470)
December 31 Accounts Payable	( 9,272)
January 1 Accounts Payable	8,670
<b>Subtotal</b>	<b>\$140,178</b>
CCA (\$20,102 + \$15,468 + \$13,500) (Note 2)	( 49,070)
Car Operating Costs (Already Deducted)	Nil
<b>Net Business Income</b>	<b>\$ 91,108</b>

**Note 1** Since Carl is a management consultant, he was not able to use the billed basis of income recognition. This means that he is not eligible for the transitional provision related to the billed basis and must include 100 percent of his unbilled work in progress in his income.

**Note 2** The CCA would be calculated as follows:

#### Class 1 CCA

January 1, 2019 UCC	\$273,540
Additions (Improvements)	41,000
AcclI Adjustment [(50%)(\$41,000)]	20,500
<b>CCA Base</b>	<b>\$335,040</b>
Rate	6%
<b>CCA For Class 1</b>	<b>\$ 20,102</b>

As the building was acquired new and was used 100 percent for non-residential purposes, it is eligible for the 6 percent CCA rate. The fact that it was the only building owned by the business would result in it automatically being allocated to a separate class, but it must remain in a separate Class 1 to continue to qualify for the 6 percent rate.

**Class 8 CCA**

January 1, 2019 UCC	\$30,240
Additions	50,000
Disposals - Lesser Of:	
• Proceeds Of Disposition = \$18,600	
• Capital Cost = \$42,000	( 18,600)
Accll Adjustment [(50%)(50,000 - 18,600)]	15,700
CCA Base	\$77,340
Rate	20%
CCA For Class 8	\$15,468

**Class 10.1 CCA**

As the cost of the car exceeds \$30,000, the addition to Class 10.1 is limited to this value. The maximum deduction for 2019 would be \$13,500 [(30%)(150%)(30,000)].

**Net Income For Tax Purposes And Taxable Income**

There are no Taxable Income deductions available. As a consequence, Taxable Income is equal to Net Income For Tax Purposes.

Net Employment Income	\$ 58,303
Property Income	35,227
Net Business Income	91,108
Pension Income	42,000
Net Income For Tax Purposes And Taxable Income	\$226,638

**Tax Payable**

Tax Payable would be calculated as follows:

Tax On First \$210,371		\$48,719
Tax On Next \$16,267 (\$226,638 - \$210,371) At 33 Percent		5,368
<hr/>		
Tax Before Credits		\$54,087
Tax Credits:		
Basic Personal Amount (Carl)	(\$12,069)	
Spouse (\$12,069 - \$9,900)	( 2,169)	
Canada Caregiver - Jerome	( 7,140)	
Carl's Age Credit [\$7,494 - (15%)(226,638 - \$37,790)]	Nil	
Carl's Pension Credit	( 2,000)	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Transfer Of Spouse's Age Credit		
[\$7,494 - (15%)(9,900 - \$37,790)]	( 7,494)	
Transfer Of Spouse's Pension Credit	( 2,000)	
Transfer Of Jerome's Disability Credit	( 8,416)	
Suzanne's Tuition Credit Transfer - Lesser Of:		
• Absolute Limit Of \$5,000		
• Actual Tuition Of \$4,600	( 4,600)	
Medical Expenses (Note 5)	( 13,650)	
<hr/>		
Total Credit Base	(\$64,369)	
Rate	15%	( 9,655)
<hr/>		
Charitable Donations (Note 6)		( 756)
Dividend Tax Credit On:		
Eligible Dividends [(6/11)(\$4,446)]		( 2,425)
Non-Eligible Dividends [(9/13)(\$488)]		( 338)
Foreign Tax Credit - Amount Withheld [(15%)(12,500)]		( 1,875)
<hr/>		
Federal Tax Payable		\$39,037
<hr/>		

**Note 5** The claim for medical expenses is determined as follows:

Medical Expenses Of Carl And Susan (\$600 + \$1,100)		\$1,700
Reduced By The Lesser Of:		
• [(3%)(226,638)] = \$6,799		
• 2019 Threshold Amount = \$2,352		( 2,352)
<hr/>		
Balance Before Dependants 18 And Over		Nil
Jerome's Medical Expenses	\$12,250	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(Nil)] = Nil	Nil	12,250
<hr/>		
Suzanne's Medical Expenses	\$ 1,400	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(Nil)] = Nil	Nil	1,400
<hr/>		
Total Medical Expense Claim		\$13,650
<hr/>		

Suzanne's child support received is not included in her Net Income For Tax Purposes. Given this, Suzanne has Net Income For Tax Purposes of nil and would qualify as a dependant of Carl's for the medical expense credit.

**Note 6** Carl's charitable donations to the United Way result in a tax credit that would be calculated as follows:

15% Of \$200	\$ 30
33% Of The Lesser Of:	
\$2,400 - \$200 = \$2,200	
\$226,638 - \$210,371 = \$16,267	726
29% Of [\$2,400 - (\$200 + \$2,200)]	Nil
<u>Total Credit</u>	<u>\$756</u>

## Solution to Assignment Problem Seven - 9

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### Employment Income

Jezebel's net employment income would be calculated as follows:

Gross Wages	\$71,500
RPP Contributions	( 2,500)
Union Dues	( 336)
<b>Net Employment Income</b>	<b>\$68,664</b>

### Property Income

Jezebel's property income would be calculated as follows:

Eligible Dividends Received	\$15,400
Gross Up Of Eligible Dividends (38%)	5,852
Non-Eligible Dividends Received	2,600
Gross Up Of Non-Eligible Dividends [(15%)(2,600)]	390
Foreign Dividends Before Withholding (\$13,600 ÷ 85%)	16,000
Interest	1,456
<b>Property Income</b>	<b>\$41,698</b>

### Net Business Income

Jezebel's net business income would be calculated as follows:

Net Cash Flow	\$96,400
December 31 Billed Receivables	11,250
January 1 Billed Receivables	( 8,400)
December 31 Work In Process (Note 1)	18,400
January 1 Work In Process	( 12,600)
December 31 Accounts Payable	( 7,485)
January 1 Accounts Payable	6,240
Non-Deductible Interest [(\$4,980 - (365)(\$10 Daily Maximum)]	1,330
Car Operating Costs (Already Deducted)	Nil
CCA (\$16,051 + \$7,621 + \$13,500) (Note 2)	( 37,172)
<b>Net Business Income</b>	<b>\$67,963</b>

**Note 1** Since the business involves management consulting, Jezebel cannot use the "billed basis of income recognition". As a result, she must include unbilled work in progress in her income.

**Note 2** The CCA would be calculated as follows:

#### Class 1 CCA

January 1, 2019 UCC	\$232,272
Additions (Improvements)	23,500
AccII Adjustment [(50%)(23,500)]	11,750
<b>Base For CCA</b>	<b>\$267,522</b>
Rate	6%
<b>CCA For Class 1</b>	<b>\$ 16,051</b>

As the building was acquired new and was used 100 percent for non-residential purposes, it is eligible for the 6 percent CCA rate. The fact that it was the only building owned by the business would result in it automatically being allocated to a separate class, but it must remain in a separate Class 1 to continue to qualify for the 6 percent rate.

**Class 8 CCA**

January 1, 2019 UCC	\$10,656
Additions	24,500
Disposals - Lesser Of:	
• Proceeds Of Disposition = \$6,200	
• Capital Cost = \$18,500	( 6,200)
Accll Adjustment [(50%)(24,500 - 6,200)]	9,150
<hr/>	<hr/>
Base For CCA	\$38,106
Rate	20%
<hr/>	<hr/>
CCA For Class 8	\$ 7,621
<hr/>	<hr/>

**Class 10.1 CCA**

As the cost of the car exceeds \$30,000, the addition to Class 10.1 is limited to this value. The maximum deduction for 2019 would be \$13,500 [(150%)(30%)(30,000)].

**Net Income For Tax Purposes And Taxable Income**

There are no Taxable Income deductions available. As a consequence, Taxable Income is equal to Net Income For Tax Purposes.

Net Employment Income	\$ 68,664
Property Income	41,698
Net Business Income	67,963
Pension Income [(12)(\$4,000)]	48,000
<hr/>	<hr/>
Net Income For Tax Purposes And Taxable Income	\$226,325
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**Tax Payable**

The *Income Tax Act* defines dependant as follows:

**ITA 118(6)** Definition of "dependant" — ..."dependant" of an individual for a taxation year means a person who at any time in the year is dependent on the individual for support and is

- (a) the child or grandchild of the individual or of the individual's spouse or common-law partner; or ...

Although Norman has Net Income of \$24,000, he is living with his parents, in a rehab program and going to university full time. This would indicate that he is dependent on Jezebel for support.

In the following calculation, Norman would not qualify for the caregiver tax credit as he is not infirm, but Jezebel can claim his medical expenses as he is a dependant and she has paid his medical expenses.

Tax Payable would be calculated as follows:

Tax On First \$210,371		\$48,719
Tax On Next \$16,224 (\$226,595 - \$210,371) At 33 Percent		5,354
<hr/>		
Tax Before Credits		\$54,073
Tax Credits:		
Basic Personal Amount (Jezebel)	(\$12,069)	
Spouse (\$12,069 - \$15,200)	( Nil)	
Canada Caregiver - Samantha (Note 3)	( 7,140)	
Jezebel's Age Credit		
[\$7,494 - (15%)(\$226,595 - \$37,790)]	Nil	
Jezebel's Pension Credit	( 2,000)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment	( 1,222)	
Transfer Of Spouse's Age Credit (Note 4)		
(\$7,494 - \$3,131)	( 4,363)	
Transfer Of Spouse's Pension Credit (Note 4)	( 2,000)	
Transfer Of Samantha's Disability Credit	( 8,416)	
Transfer Of Norman's Education Credits (Note 5)	( Nil)	
Medical Expenses (Note 6)	( 19,150)	
<hr/>		
Total Credit Base	(\$59,969)	
Rate	15%	( 8,995)
<hr/>		
Charitable Donations (Note 7)		( 558)
Dividend Tax Credit On:		
Eligible Dividends [(6/11)(\$5,852)]		( 3,192)
Non-Eligible Dividends [(9/13)(\$390)]		( 270)
Foreign Tax Credit - Amount Withheld [(15%)(\$16,000)]		( 2,400)
<hr/>		
Federal Tax Payable		\$38,658
<hr/>		

**Note 3** As Samantha has a physical infirmity, Jezebel can claim the Canada caregiver credit for her.

**Note 4** Bernard's Net Income For Tax Purposes is below the threshold amount for the age credit, so his age credit will not be reduced. Since Bernard has no deductions from his Net Income For Tax Purposes, his Taxable Income is equal to \$15,200.

In order to calculate how much of his age credit can be transferred, he must first reduce his federal Tax Payable to nil using a portion of his age credit calculated as follows:

Bernard's Taxable Income	\$15,200
Basic Personal Amount	( 12,069)
<hr/>	
Age Credit Base Used By Bernard	\$ 3,131
<hr/>	

Bernard can transfer all of his pension income credit since his federal Tax Payable has been reduced to nil by the use of his age credit.

**Note 5** Norman's tuition credit is \$11,300. While the maximum transfer is \$5,000, this amount has to be reduced by the excess of Norman's Net Income For Tax Purposes over his basic personal credit. This amount would be \$11,931 (\$24,000 - \$12,069), a value that would reduce the maximum transfer to nil.

**Note 6**

The claim for medical expenses is determined as follows:

Medical Expenses Of Jezebel And Bernard (\$450 + \$1,475)		\$1,925
Reduced By The Lesser Of:		
• [(3%)(\$226,595)] = \$6,798		
• 2019 Threshold Amount = \$2,352		( 2,352)
<hr/>		
Balance Before Dependants 18 And Over		Nil
Samantha's Medical Expenses	\$11,400	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(Nil)] = Nil	Nil	\$11,400
<hr/>		
Norman's Medical Expenses	\$ 8,470	
Reduced By The Lesser Of:		
• \$2,352		
• [(3%)(\$24,000)] = \$720	( 720)	7,750
<hr/>		
Total Medical Expense Claim		\$19,150
<hr/>		

**Note 7** Jezebel's charitable donations credit would be calculated as follows:

15 Percent Of \$200	\$ 30
33 Percent Of The Lesser Of:	
(\$1,800 - \$200) = \$1,600	
(\$226,595 - \$210,371) = \$16,224	528
29 Percent Of \$1,800 - (\$1,600 + \$200)	Nil
<hr/>	
Total Credit	\$558
<hr/>	

## CHAPTER EIGHT SOLUTIONS

### Solution to Assignment Problem Eight - 1

#### Part A

The total cost of the 96 shares remaining on December 31, 2019 would be \$2,596. This is calculated in the following table:

Acquisition Or Sale Date	Shares Purchased (Sold)	Cost Per Share	Total Cost	Average Cost/Share
February, 2015	60	24.00	\$ 1,440	
November, 2016	90	28.00	2,520	
April, 2017	45	30.00	1,350	
Subtotal	195		\$5,310	\$27.23
October, 2017	( 68)	27.23	( 1,852)	
September, 2019	22	26.00	572	
Subtotal	149		\$4,030	\$27.05
November, 2019	( 53)	27.05	( 1,434)	
December 31, 2019 Balances	96		\$2,596	

#### Part B

The average cost of the shares sold during July, 2019 would be calculated as follows:

April, 2018 Purchase [(200)(\$24)]	\$ 4,800
December, 2018 Purchase [(160)(\$33)]	5,280
Total Cost	\$10,080
Average Cost (\$10,080 ÷ 360)	\$28.00

Given this average cost, the taxable capital gain on the July, 2019 sale of shares would be calculated as follows:

Proceeds [(260)(\$36)]	\$9,360
Cost [(260)(\$28)]	( 7,280)
Capital Gain	\$2,080
Inclusion Rate	1/2
Taxable Capital Gain	\$1,040

## Solution to Assignment Problem Eight - 2

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### **Basic Alternatives**

The basic issue here is whether the profit resulting from the sale is business income or, alternatively, a capital gain. The basic criteria in making this distinction is the intent of the taxpayer at the time the asset is acquired. Was it being acquired to produce income or, alternatively, was it being acquired for resale at a profit? Additional criteria (most of which are relevant to this solution) that can be used in determining intent are as follows:

- length of ownership period
- number and/or frequency of such transactions
- relationship to the taxpayer's business
- supplemental work on the property
- nature of the asset

### **Business Income Approach**

Cyndey did not receive income from the property and the length of the ownership period was short. She was planning to renovate the property. She is a plumber and members of her family are in the construction business.

This would suggest business income treatment. Also supporting this view is the fact that Cyndey believed, at the time of purchase, that the property could be resold at a profit. The addition to Net Income For Tax Purposes in 2019 resulting from business income treatment would be as follows:

Proceeds Of Disposition	\$1,500,000
Cost	( 250,000)
Addition To Net Income For Tax Purposes	\$1,250,000

The reserve available under ITA 20(1)(n) is only available on business income, i.e., property sold during the ordinary course of business. Since Cyndey does not sell property as her business, she would not be eligible for this reserve. Business income reserves are covered in Chapter 6.

### **Capital Gains Approach**

The fact that the original intent was to renovate and rent out units would suggest capital gains treatment. In addition, the offer was unsolicited and this property sale appears to be the only one that Cyndey has made. Cydney's current business appears to be to create rental properties. The fact that she is planning to get a degree in social work would also suggest capital gains treatment.

It would appear that the arguments for capital gains treatment are stronger than those for business income treatment. However, this situation could change if Cyndey sells more of her rental properties in the near future as that would make this sale one of several and more indicative of business income.

The minimum addition to Net Income For Tax Purposes in 2019 resulting from capital gains treatment would be as follows:

Proceeds Of Disposition	\$1,500,000
Capital Cost Of Building And Adjusted Cost Base Of Land	( 250,000)
<hr/>	
Total Capital Gain	\$1,250,000
Less Reserve - Lesser Of:	
• [(\$1,250,000)(\$1,000,000 ÷ \$1,500,000)] = \$833,333	
• [(\$1,250,000)(20%)(4 - 0)] = \$1,000,000	( 833,333)
<hr/>	
Capital Gain	\$ 416,667
Inclusion Rate	1/2
<hr/>	
Addition To Net Income For Tax Purposes	\$ 208,334
<hr/>	

While additional income would have to be recognized in 2020 to 2023 under this approach, the total amount would only be \$625,000, one-half of the amount to be recognized under the business income approach. In addition, the capital gains approach provides significant tax deferral through the use of a capital gains reserve.

## Solution to Assignment Problem Eight - 3

### Capital Gains Reserve

With respect to the capital gains, under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- $[(\text{Capital Gain})(\text{Proceeds Not Yet Due} \div \text{Total Proceeds})]$
- $[(\text{Capital Gain})(20\%)(4 - \text{Number Of Preceding Years Ending After Disposition})]$

### 2019 Results

For this year, the reserve would be the lesser of:

- $[(\$2,065,000)(\$3,000,000 \div \$3,650,000)] = \$1,697,260$
- $[(\$2,065,000)(20\%)(4 - 0)] = \mathbf{\$1,652,000}$

The results for this year are as follows:

Proceeds Of Disposition	\$3,650,000
Adjusted Cost Base	( 1,585,000)
Total Capital Gain	\$2,065,000
Reserve	( 1,652,000)
2019 Capital Gain	\$ 413,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 206,500
Interest [(5%)(\\$3,000,000)]	150,000
Total	\$ 356,500

As no provision can be made for the estimated cost of the warranty, the total Net Income For Tax Purposes inclusion for 2019 would be \$356,500.

### 2020 Results

For this year, the reserve would be the lesser of:

- $[(\$2,065,000)(\$2,000,000 \div \$3,650,000)] = \mathbf{\$1,131,507}$
- $[(\$2,065,000)(20\%)(4 - 1)] = \$1,239,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2020 would be as follows:

2019 Reserve Added To Income	\$1,652,000
2020 Reserve	( 1,131,507)
Capital Gain	\$ 520,493
Inclusion Rate	1/2
Taxable Capital Gain	\$ 260,247
Interest [(5%)(\\$2,000,000)]	100,000
Total	\$ 360,247

**Note To Instructor** Loss carry overs are covered in detail in Chapter 11. This solution assumes that the student knows the basic net capital loss carry over provisions which you may decide is inappropriate.

### 2021 Results

For this year, the reserve would be the lesser of:

- $[(\$2,065,000)(\$1,000,000 \div \$3,650,000)] = \$565,753$
- $[(\$2,065,000)(20\%)(4 - 2)] = \$826,000$

Based on this, the net allowable capital loss would be calculated as follows:

2020 Reserve Added To Income	\$1,131,507
2021 Reserve	( 565,753)
Capital Gain	\$ 565,754
Warranty Payment (A Capital Loss)	( 600,000)
Net Capital Loss	(\$ 34,246)
Inclusion Rate	1/2
Net Allowable Capital Loss	(\$ 17,123)

The problem states that Lester has no other capital gains or losses unrelated to this land sale. This means that this capital loss has no effect on 2021 Net Income For Tax Purposes. It is available to be carried back to 2019 and a refund claimed.

The inclusion in Net Income For Tax Purposes would be as follows:

Accrued Interest [(5%)(\\$1,000,000)]	\$50,000
---------------------------------------	----------

### 2022 Results

There are no amounts becoming payable after 2022. Given this, the 2022 reserve is nil.

2021 Reserve Added To Income	\$ 565,753
2022 Reserve	Nil
Capital Gain	\$ 565,753
Bad Debt (A Capital Loss)	( 1,000,000)
Net Capital Loss	(\$ 434,247)
Inclusion Rate	1/2
Net Allowable Capital Loss	(\$ 217,124)

This net allowable capital loss has no effect on 2022 Net Income For Tax Purposes.

A portion of the loss, \$189,377 (\$206,500 - \$17,123) can be carried back to 2019. The balance of \$27,747 (\$217,124 - \$189,377) can be carried back to 2020.

Since Lester has Net Income of more than \$80,000, the write-off of the interest accrued for 2021 decreases his 2022 Net Income For Tax Purposes by \$50,000.

**Summary (Not Required)**

The results can be summarized as follows:

<b>Year</b>	<b>Interest</b>	<b>Net Taxable Gain (Allowable Loss)</b>
2019	\$150,000	\$206,500
2020	100,000	260,247
2021	50,000	( 17,123)
2022	( 50,000)	( 217,124)
<b>Totals</b>	<b>\$250,000</b>	<b>\$232,500</b>

The amount of the taxable capital gain can be verified as follows:

Initial Capital Gain	\$2,065,000
Warranty Payment	( 600,000)
Bad Debt	( 1,000,000)
Capital Gain	\$ 465,000
Inclusion Rate	1/2
<b>Taxable Capital Gain</b>	<b>\$ 232,500</b>

## Solution to Assignment Problem Eight - 4

### Capital Gain And Recapture

The immediate tax consequences of the sale can be calculated as follows:

	Land	Building	Total Gain
Proceeds Of Disposition	\$900,000	\$1,900,000	
Adjusted Cost Base/Capital Cost	( 800,000)	( 1,500,000)	
Capital Gain	\$100,000	\$ 400,000	\$500,000

The taxable amount of this gain would be \$250,000  $[(1/2)(\$500,000)]$ .

	Building
Opening UCC Balance Of Class 1	\$1,248,019
Lesser Of:	
• Proceeds Of Disposition = \$1,900,000	
• Capital Cost = \$1,500,000	( 1,500,000)
Negative Ending Balance = Recapture Of CCA	(\$ 251,981)

### Part A - Down Payment = 10 Percent

#### 2019 Results

The \$251,981 of recapture must be included in income in this year.

With a down payment of \$280,000  $[(10\%)(\$2,800,000)]$ , interest must be accrued on the outstanding balance of \$2,520,000  $(\$2,800,000 - \$280,000)$ . At 6 percent, the amount would be \$151,200  $[(6\%)(\$2,520,000)]$ .

With respect to the capital gains, under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- $[(\text{Capital Gain})(\text{Proceeds Not Yet Due} \div \text{Total Proceeds})]$
- $[(\text{Capital Gain})(20\%)(4 - \text{Number Of Preceding Years Ending After Disposition})]$

While the gains on the land and building must be calculated separately, there is no reason to separate them for the purposes of determining the available reserve. This is based on the fact that, in the absence of some reason to apply it differently, the 10 percent down payment would apply equally to both components of the sale.

With a down payment of \$280,000, the available reserve would be the lesser of:

- $[(\$500,000)(\$2,520,000 \div \$2,800,000)] = \$450,000$
- $[(\$500,000)(20\%)(4 - 0)] = \$400,000$

Using the lesser figure of \$400,000, the taxable capital gain to be included in Net Income For Tax Purposes would be \$50,000  $[(1/2)(\$500,000 - \$400,000)]$ . The total inclusion in Net Income For Tax Purposes for 2019 would be as follows:

Recapture	\$251,981
Interest	151,200
Taxable Capital Gain	50,000
Total For 2019	\$453,181

**2020 Results**

For this year, with no change in the principal payable, the reserve would be the lesser of:

- $[(\$500,000)(\$2,520,000 \div \$2,800,000)] = \$450,000$
- $[(\$500,000)(20\%)(4 - 1)] = \$300,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2020 would be as follows:

2019 Reserve Added To Income	\$400,000
2020 Reserve	( 300,000)
<hr/>	
Net Capital Gain	\$100,000
Inclusion Rate	1/2
<hr/>	
Net Taxable Capital Gain	\$ 50,000
Interest (Same As 2019)	151,200
<hr/>	
Total For 2020	\$201,200
<hr/>	

**2021 Results**

For this year, the reserve would be the lesser of:

- $[(\$500,000)(\text{Nil} \div \$2,800,000)] = \text{Nil}$
- $[(\$500,000)(20\%)(4 - 2)] = \$200,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2021 would be as follows:

2020 Reserve Added To Income	\$300,000
2021 Reserve	Nil
<hr/>	
Net Capital Gain	\$300,000
Inclusion Rate	1/2
<hr/>	
Net Taxable Capital Gain	\$150,000
Interest	Nil
<hr/>	
Total For 2021	\$150,000
<hr/>	

As would be expected, the total taxable capital gain over the 3 years is \$250,000 (\$50,000 + \$50,000 + \$150,000).

**Part B - Down Payment = 30 Percent**

**2019 Results**

While the down payment is changed in this case, the amount of recapture would be the same as in Part A. The down payment would be \$840,000  $[(30\%)(\$2,800,000)]$ , leaving a balance of \$1,960,000. Interest on this balance would be \$117,600  $[(6\%)(\$1,960,000)]$ .

With the down payment of \$840,000, the available reserve would be the lesser of:

- $[(\$500,000)(\$1,960,000 \div \$2,800,000)] = \$350,000$
- $[(\$500,000)(20\%)(4 - 0)] = \$400,000$  (the same as in Part A)

Using the lesser figure of \$350,000, the taxable capital gain to be included in Net Income For Tax Purposes would be \$75,000  $[(1/2)(\$500,000 - \$350,000)]$ .

The total inclusion in Net Income For Tax Purposes for 2019 would be as follows:

Recapture	\$251,981
Interest	117,600
Taxable Capital Gain	75,000
<hr/>	
Total For 2019	\$444,581
<hr/>	

**2020 Results**

For this year, the reserve would be the lesser of:

- $[(\$500,000)(\$1,960,000 \div \$2,800,000)] = \$350,000$
- $[(\$500,000)(20\%)(4 - 1)] = \$300,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2020 would be as follows:

2019 Reserve Added To Income	\$350,000
2020 Reserve	( 300,000)
<hr/>	
Net Capital Gain	\$ 50,000
Inclusion Rate	1/2
<hr/>	
Net Taxable Capital Gain	\$ 25,000
Interest (Same As 2019)	117,600
<hr/>	
Total For 2020	\$142,600
<hr/>	

**2021 Results**

For this year, the results are the same as in Part A. The reserve would be the lesser of:

- $[(\$500,000)(\text{Nil} \div \$2,800,000)] = \text{Nil}$
- $[(\$500,000)(20\%)(4 - 2)] = \$200,000$

Based on this, the total inclusion in Net Income For Tax Purposes for 2021 would be as follows:

2020 Reserve Added To Income	\$300,000
2021 Reserve	Nil
<hr/>	
Net Capital Gain	\$300,000
Inclusion Rate	1/2
<hr/>	
Net Taxable Capital Gain	\$150,000
Interest	Nil
<hr/>	
Total For 2021	\$150,000
<hr/>	

As was the case in Part A, the total taxable capital gain over the 3 years is \$250,000 (\$75,000 + \$25,000 + \$150,000).

## Solution to Assignment Problem Eight - 5

### Capital Gains Treatment

As Erin's original intent was to develop these tracts of land into income producing properties, it is likely that the gains resulting from the sale of these two properties would qualify as capital gains. This view is supported by the fact that the offers he received were unsolicited.

The amount of the capital gains resulting from the dispositions would be calculated as follows:

	Tract 1	Tract 1
Proceeds Of Disposition	\$879,000	\$1,000,000
Adjusted Cost Base	( 325,000)	( 430,000)
Capital Gain	\$554,000	\$ 570,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$277,000	\$ 285,000

### 2019 Solution

At the end of 2019, the proceeds not due for Tract 1 is \$483,450 (\$879,000 - \$395,550). The corresponding figure for Tract 2 is \$900,000 (\$1,000,000 - \$100,000).

The minimum taxable capital gain to be included in Erin's income for 2019 would be calculated as follows:

	Tract 1	Tract 2
Total Capital Gain	\$554,000	\$570,000
Maximum Reserve For 2019:		
Tract 1 - Lesser Of:		
$[(\$554,000)(\$483,450 \div \$879,000)] = \$304,700$		
$[(\$554,000)(20\%)(4)] = \$443,200$	( 304,700)	
Tract 2 - Lesser Of:		
$[(\$570,000)(\$900,000 \div \$1,000,000)] = \$513,000$		
$[(\$570,000)(20\%)(4)] = \$456,000$		( 456,000)
Subtotal	\$249,300	\$114,000
Inclusion Rate	1/2	1/2
2019 Inclusion	\$124,650	\$ 57,000

In addition to the taxable capital gains, Erin would have to recognize the following amounts of interest calculated on the beginning of the year balance:

Tract 1 $[(6\%)(\$483,450)]$	\$29,007
Tract 2 $[(6\%)(\$900,000)]$	54,000
Total Interest	\$83,007

The total amount to be included in Erin's Net Income For Tax Purposes for 2019 would be calculated as follows:

Tract 1 Taxable Capital Gain	\$124,650
Tract 2 Taxable Capital	57,000
Interest	83,007
Total 2019 Income	\$264,657

**2020 Solution**

At the end of 2020, the proceeds not due for Tract 1 is unchanged at \$483,450. The proceeds not due for Tract 2 are reduced to \$600,000 (\$900,000 - \$300,000). Given this, the minimum taxable capital gains for 2020 can be calculated as follows:

	Tract 1	Tract 2
2019 Reserve Added Back	\$304,700	\$456,000
2020 Reserve:		
Tract A - Lesser Of:		
[(554,000)(483,450 ÷ 879,000)] = \$304,700		
[(554,000)(20%)(3)] = \$332,400	( 304,700)	
Tract 2 - Lesser Of:		
[(570,000)(600,000 ÷ 1,000,000)] = \$342,000		
[(570,000)(20%)(3)] = \$342,000		( 342,000)
Subtotal	Nil	\$114,000
Inclusion Rate	N/A	1/2
2020 Inclusion	Nil	\$ 57,000

In addition to the taxable capital gain, Erin would have to recognize the following amounts of interest calculated on the beginning of the year balance:

Tract 1 [(6%)(483,450)]	\$29,007
Tract 2 [(6%)(900,000)]	54,000
Total Interest	\$83,007

The total amount to be included in Erin's Net Income For Tax Purposes for 2020 would be calculated as follows:

Tract 1 Taxable Capital Gain	\$ Nil
Tract 2 Taxable Capital	57,000
Interest	83,007
Total 2020 Income	\$140,007

**2021 Solution**

At the end of 2021, the proceeds not due for Tract 1 is unchanged at \$483,450. The proceeds not due for Tract 2 are reduced to \$300,000 (\$600,000 - \$300,000). Given this, the minimum taxable capital gains for 2021 can be calculated as follows:

	Tract 1	Tract 2
2020 Reserve Added Back	\$304,700	\$342,000
2021 Reserve:		
Tract A - Lesser Of:		
[(554,000)(483,450 ÷ 879,000)] = \$304,700		
[(554,000)(20%)(2)] = \$221,600	( 221,600)	
Tract 2 - Lesser Of:		
[(570,000)(300,000 ÷ 1,000,000)] = \$171,000		
[(570,000)(20%)(2)] = \$228,000		( 171,000)
Subtotal	\$ 83,100	\$171,000
Inclusion Rate	1/2	1/2
2021 Inclusion	\$ 41,550	\$ 85,500

In addition to the taxable capital gain, Erin would have to recognize the following amounts of interest calculated on the beginning of the year balance:

Tract 1 [(6%)(\\$483,450)]	\$29,007
Tract 2 [(6%)(\\$600,000)]	36,000
Total Interest	\$65,007

The total amount to be included in Erin's Net Income For Tax Purposes for 2021 would be calculated as follows:

Tract 1 Taxable Capital Gain	\$ 41,550
Tract 2 Taxable Capital	85,500
Interest	65,007
Total 2021 Income	\$192,057

**2022 Solution**

At the end of 2022, the proceeds not due for both Tract 1 and Tract 2 are nil. Given this, the minimum taxable capital gains for 2022 can be calculated as follows:

	<b>Tract 1</b>	<b>Tract 2</b>
2021 Reserve Added Back	\$221,600	\$171,000
2022 Reserve:		
Tract A - Lesser Of:		
[(\\$554,000)(Nil ÷ \$879,000)] = Nil		
[(\\$554,000)(20%)(1)] = \$110,800	Nil	
Tract 2 - Lesser Of:		
[(\\$570,000)(Nil ÷ \$1,000,000)] = Nil		
[(\\$570,000)(20%)(1)] = \$114,000		Nil
Subtotal	\$221,600	\$171,000
Inclusion Rate	1/2	1/2
2022 Inclusion	\$110,800	\$ 85,500

In addition to the taxable capital gains, Erin would have to recognize the following amounts of interest calculated on the beginning of the year balance:

Tract 1 [(6%)(\\$483,450)]	\$29,007
Tract 2 [(6%)(\\$300,000)]	18,000
Total Interest	\$47,007

The total amount to be included in Erin's Net Income For Tax Purposes for 2022 would be calculated as follows:

Tract 1 Taxable Capital Gain	\$110,800
Tract 2 Taxable Capital	85,500
Interest	47,007
Total 2022 Income	\$243,307

**Verification**

As calculated at the beginning of this solution, the taxable capital gain on Tract 1 should total \$277,000, while the taxable capital gain on Tract 2 should be \$285,000. That the use of reserves has produced the same total amount can be verified as follows:

<b>Year</b>	<b>Tract 1</b>	<b>Tract 2</b>
2019	\$124,650	\$ 57,000
2020	Nil	57,000
2021	41,550	85,500
2022	110,800	85,500
Total Gain	\$277,000	\$285,000

## Solution to Assignment Problem Eight - 6

### Total Capital Gain

The total amount of the capital gain can be calculated as follows:

Proceeds Of Disposition	\$2,500,000
Adjusted Cost Base	( 750,000)
Total Capital Gain	\$1,750,000

### Reserve Limits

Under ITA 40(1)(a)(iii), the amount that can be deducted as a capital gains reserve is equal to the lesser of:

- [(Capital Gain)(Proceeds Not Yet Due ÷ Total Proceeds)]
- [(Capital Gain)(20%)(4 - Number Of Preceding Years Ending After Disposition)]

The payment schedule for the sale required a 25 percent down payment, followed by annual payments of 3 percent in the following years. Given this, the reserve percentages under the two components of the ITA 40(1)(a)(iii) schedule are as follows:

Year	Proceeds Not Yet Due	20 Percent Formula
2019	75%	80%
2020	72%	60%
2021	69%	40%
2022	66%	20%
2023	63%	Nil

### 2019 Results

In 2019, the proceeds not yet due calculation provides the lower figure. Based on this, the gain to be recognized will be calculated as follows:

Total Capital Gain	\$1,750,000
Reserve [(\$1,750,000)(75 Percent)]	( 1,312,500)
Net Capital Gain	\$ 437,500
Inclusion Rate	1/2
Net Taxable Capital Gain For 2019	\$ 218,750

### 2020 Through 2023 Results

In these years, the 20 percent formula provides the lower figure. Based on this, the gains to be recognized are calculated as follows.

2019 Reserve Added To Income	\$1,312,500
2020 Reserve [(\$1,750,000)(60%)]	( 1,050,000)
Net Capital Gain	\$ 262,500
Inclusion Rate	1/2
Net Taxable Capital Gain For 2020	\$ 131,250

2020 Reserve Added To Income	\$1,050,000
2021 Reserve [(\$1,750,000)(40%)]	( 700,000)
Net Capital Gain	\$ 350,000
Inclusion Rate	1/2
Net Taxable Capital Gain For 2021	\$ 175,000

2021 Reserve Added To Income	\$700,000
2022 Reserve [(\$1,750,000)(20%)]	( 350,000)
Net Capital Gain	\$350,000
Inclusion Rate	1/2
Net Taxable Capital Gain For 2022	\$175,000
<hr/>	
2022 Reserve Added To Income	\$350,000
2023 Reserve [(\$1,750,000)(0%)]	Nil
Net Capital Gain	\$350,000
Inclusion Rate	1/2
Net Taxable Capital Gain For 2023	\$175,000
<hr/>	

The results for the years 2019 through 2023 are summarized in the following table:

2019	\$218,750
2020	131,250
2021	175,000
2022	175,000
2023	175,000
Total Of Taxable Capital Gains	\$875,000
<hr/>	

## Solution to Assignment Problem Eight - 7

The gains on the two properties can be calculated as follows:

	Ottawa Home	Calgary Condominium
Proceeds Of Disposition	\$724,000	\$415,000
Adjusted Cost Base	( 628,000)	( 325,000)
Real Estate Commissions		
[(4%)(\$724,000)]	( 28,960)	
[(4%)(\$415,000)]		( 16,600)
<b>Total Capital Gain</b>	<b>\$ 67,040</b>	<b>\$ 73,400</b>

As the period of ownership differs for the two properties, it is necessary to calculate the annual amount of the capital gain:

$$\text{Ottawa Home: } \$67,040 \div 12 = \$5,587$$

$$\text{Calgary Condominium: } \$73,400 \div 9 = \$8,156$$

As the annual gain is significantly larger on the Calgary condominium and its ownership period is shorter than that of the Ottawa home, this gain should be completely eliminated. Because of the plus 1 in the exemption formula, this can be accomplished by designating this property as her principal residence for the 8 years 2012 through 2019. This leaves the 4 years 2008 through 2011 for designation of the Ottawa home as her principal residence.

The required calculations would be as follows:

	Ottawa Home	Calgary Condominium
Total Capital Gain	\$67,040	\$73,400
Exemption:		
Ottawa Home		
[\$67,040][(4 + 1) ÷ 12]	( 27,933)	
Condominium		
[\$73,400][(8 + 1) ÷ 9]		( 73,400)
Capital Gain	\$39,107	Nil
Inclusion Rate	1/2	N/A
<b>Taxable Capital Gain</b>	<b>\$19,554</b>	<b>Nil</b>

This gives a total taxable capital gain on the two properties of \$19,554.

## Solution to Assignment Problem Eight - 8

### Classification Of Property

All of the items sold are personal use property. However, if they can be classified as "listed personal property", their tax treatment will be different. Under ITA 54, listed personal property consists of the following items.

- (i) print, etching, drawing, painting, sculpture, or other similar work of art,
- (ii) jewelry,
- (iii) rare folio, rare manuscript, or rare book,
- (iv) stamp, or
- (v) coin.

### Personal Use Property (Automobile, Boat, and Desk)

While gains on the disposition of personal use property are taxable, losses are not deductible. This means that, because there is a loss on this property, selling the sailboat would have no effect on Mr. Firenza's Net Income For Tax Purposes. However, the gains on both the automobile and the desk would be subject to tax. The capital gains, taking into consideration the \$1,000 floor rule, would be calculated as follows:

	Automobile	Desk
Proceeds Of Disposition	\$320,000	\$2,200
Original Cost - Automobile	( 42,000)	
Additions To Adjusted Cost Base	( 135,000)	
Adjusted Cost Base - Desk, Greater Of:		
• Cost = \$600		
• \$1,000 Floor		( 1,000)
Capital Gain	\$143,000	\$1,200

### Listed Personal Property (Coin Collection, Manuscript, Painting)

The calculations here are as follows:

	Coins	Manuscript	Painting
Proceeds Of Disposition	\$23,500	\$ 8,500	\$350,000
Adjusted Cost Base	( 17,600)	( 42,000)	( 275,000)
Selling Costs - Painting [(20%)(350,000)]			( 70,000)
Capital Gain (Loss)	\$ 5,900	(\$33,500)	\$ 5,000

### Summary

The total addition to Net Income For Tax Purposes would be as follows:

<b>Personal Use Property</b>		
Gain On Automobile	\$143,000	
Gain On Desk	1,200	
Loss On Boat	N/A	\$144,200
<b>Listed Personal Property</b>		
Gain On Coin Collection	\$5,900	
Gain On Painting	5,000	
Total Gain On Listed Personal Property	\$10,900	
Loss On Manuscript (Note)	( 10,900)	Nil
Net Capital Gains		\$144,200
Inclusion Rate		1/2
Addition To Net Income For Tax Purposes		\$ 72,100

**Note** The total loss on the manuscript is \$33,500 ( $\$8,500 - \$42,000$ ). However, it can only be deducted to the extent of the gains on other listed personal property dispositions. The remaining loss of \$22,600 ( $\$33,500 - \$10,900$ ) can be carried over to other years. As is discussed in Chapter 11, such losses can be carried back 3 years and forward for 7 years.

## Solution to Assignment Problem Eight - 9

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### 2015 Result

Neither the receipt of the inheritance nor the purchase of shares create any additions to Net Income For Tax Purposes. Note, however, that the adjusted cost base of the shares will be:

$$[(4,500)(US\$43)(C\$0.98)] \qquad C\$189,630$$

The Canadian dollar amount of the funds left in the account would be calculated as follows:

$$[(US\$6,500)(C\$0.98)] \qquad C\$6,370$$

### 2016 Result

The receipt of the dividends will result in the following addition to Richie's 2016 Net Income For Tax Purposes:

$$[(4,500)(US\$2.05)(C\$1.03)] \qquad C\$9,501.75$$

### 2017 Results

The receipt of the dividends will result in the following addition to Richie's 2017 Net Income For Tax Purposes:

$$[(4,500)(US\$2.05)(C\$1.09)] \qquad C\$10,055.25$$

### 2018 Results

The receipt of the dividends will result in the following addition to Richie's 2018 Net Income For Tax Purposes:

$$[(4,500)(US\$2.05)(C\$1.26)] \qquad C\$11,623.50$$

In addition to the dividends, there will be a taxable capital gain resulting from the sale of the shares:

Proceeds Of Disposition			
[(4,500)(US\$35)]	US\$157,500	@\$1.28	C\$201,600
Adjusted Cost Base			
[(4,500)(US\$43)]	(US\$193,500)	@\$0.98	(C\$189,630)
Gain (Loss)	(US\$ 36,000)		C\$ 11,970
Inclusion Rate			1/2
Taxable Capital Gain			C\$ 5,985

This results in a total addition to Richie's Net Income For Tax Purposes of C\$17,608.50 (C\$11,623.50 + C\$5,985.00)

### 2019 Results

At this point, Richie's brokerage account contains US\$191,675 [US\$6,500 + (3@US\$9,225) + US\$157,500]. There will be a capital gain on the conversion of this amount to Canadian dollars calculated as follows:

Converted Dollars [(US\$191,675)(C\$1.35)]		C\$258,761.25
Adjusted Cost Base:		
[(US\$6,500)(C\$0.98)]	(C\$ 6,370.00)	
[(4,500)(US\$2.05)(C\$1.03)]	( 9,501.75)	
[(4,500)(US\$2.05)(C\$1.09)]	( 10,055.25)	
[(4,500)(US\$2.05)(C\$1.26)]	( 11,623.50)	
[(4,500)(US\$35)(C\$1.28)]	( 201,600.00)	( 239,150.50)
Capital Gain		C\$ 19,611
ITA 39(1.1) Reduction Of Capital Gain		( 200)
Net Capital Gain		C\$ 19,411
Inclusion Rate		1/2
Taxable Capital Gain		C\$ 9,705.50

Because Richie is an individual, the ITA 39(1.1) deduction of \$200 reduces the capital gain on the foreign exchange conversion.

## Solution to Assignment Problem Eight - 10

### 2017 Results

As the 2017 change in use is from personal to business, the deemed disposition will take place at a value, for CCA purposes, of cost plus one-half of the excess of fair market value over cost [ITA 13(7)(b)]. Although Miss Coos previously owned this building, the half-year rule applies to this change in use because the building was not being used to produce business or property income prior its change in use. As the building is not used 90 percent or more for non-residential purposes, the enhanced CCA rates for buildings cannot be used.

Given this, the maximum CCA that can be deducted in 2017 can be calculated as follows:

Cost Of Building	\$270,000
Bump Up On Transfer $[(1/2)(\$360,000 - \$270,000)]$	45,000
Capital Cost For CCA Purposes Only	\$315,000
Rental Portion	30%
Opening UCC	\$ 94,500
One-Half Net Additions	( 47,250)
CCA Base	\$ 47,250
Maximum Class 1 CCA At 4 Percent	( 1,890)
One-Half Net Additions	47,250
January 1, 2018 UCC	\$ 92,610

The deemed disposition would result in a taxable capital gain on the building of \$13,500  $[(1/2)(30\%)(\$360,000 - \$270,000)]$ . As the \$90,000 value of the land is unchanged, there is no capital gain on the land.

It is likely that Ms. Coos would designate this property as her principal residence for 2015 and 2016, thereby eliminating this gain from her income.

### 2018 Results

The required CCA calculation for 2018 is as follows:

Opening UCC	\$92,610
Maximum CCA At 4 Percent	( 3,704)
January 1, 2019 UCC	\$88,906

### 2019 Results

In this year, the transfer is from business to personal use and, as a consequence, the disposition will result in a deduction from UCC in an amount equal to the lesser of 10 percent of the capital cost for CCA purposes (\$315,000) and 10 percent of the fair market value of \$420,000.

The required CCA calculation for 2019 is as follows:

Opening UCC	\$88,906
Disposition - Lesser Of:	
• Capital Cost $[(10\%)(\$315,000)] = \$31,500$	
• Fair Market Value $[(10\%)(\$420,000)] = \$42,000$	( 31,500)
CCA Base	\$57,406
Maximum CCA At 4 Percent	( 2,296)
January 1, 2020 UCC	\$55,110

The deemed disposition results in a taxable capital gain of \$3,000  $[(1/2)(10\%)(\$420,000 - \$360,000)]$  on the building. As the fair market value of the land remains unchanged at \$90,000, there would be no capital gain on the land.

Note that the \$360,000 capital cost used in the calculation of the taxable capital gain is not the same as the \$315,000 capital cost used in the calculation of CCA.

## Solution to Assignment Problem Eight - 11

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Ms. Councill's taxable capital gain on deemed dispositions resulting from her departure from Canada would be calculated as follows:

Listed Personal Property:		
Oil Painting (\$38,000 - \$33,000)	\$ 5,000	
Coin Collection (Note 1)	( 5,000)	Nil
Enbridge Shares (\$68,000 - \$42,000)		\$26,000
Veresan Shares (\$52,000 - \$63,000)		( 11,000)
Vacant Land (Note 2)		N/A
Personal Residence (Note 2)		N/A
Power Boat (Note 3)		N/A
Councill Ltd. Shares		32,000
Net Capital Gain		\$47,000
Inclusion Rate		1/2
Net Taxable Capital Gain On Departure		\$23,500

**Note 1** Both the oil painting and the coin collection are listed personal property. While there is a \$7,000 (\$11,000 - \$4,000) loss on the coin collection, it can only be deducted to the extent of the \$5,000 gain on the oil painting. However, the remaining \$2,000 (\$7,000 - \$5,000) can be carried back 3 years to be applied against any gains on listed personal property that occurred in those years. Although it can also be carried forward for up to 7 years, it is unlikely that Ms. Councill will have listed personal property in Canada once she becomes a non-resident.

**Note 2** Real property is exempted from the ITA 128.1(4)(b) deemed disposition requirement. However, as it is taxable Canadian property, a later sale of either the vacant land or the personal residence will attract Canadian income taxes. With respect to the residence, if it can be designated as her principal residence, she might wish to elect to have a disposition in order to take advantage of the principal residence exemption. This election is covered in Chapter 20, Issues In International Taxation, and students should not be expected to include the effects of this election in a Chapter 8 problem.

**Note 3** Losses on personal use property are not deductible.

## Solution to Assignment Problem Eight - 12

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In both Cases, since the common shares have been held for more than 185 days, the sales are qualifying dispositions. In both Cases, the eligible small business corporation common shares were purchased within 120 days after the end of the year in which the qualifying disposition took place. As a result, they can be designated as replacement shares.

### **Case A**

The capital gain on the disposition is \$60,000. As the cost of the replacement shares is only \$90,000, the permitted deferral would be \$54,000  $[(\$90,000 \div \$100,000)(\$60,000)]$ . The adjusted cost base of the replacement shares would be \$36,000  $(\$90,000 - \$54,000)$ .

### **Case B**

The capital gain on the disposition is \$600,000. As the cost of the replacement shares is equal to the qualifying cost of the proceeds of disposition, the permitted deferral would be \$600,000. This would leave the adjusted cost base of the replacement shares at \$400,000  $(\$1,000,000 - \$600,000)$ . Note that the deferral election can be made because the replacement shares were acquired within 120 days after the end of the year.

## Solution to Assignment Problem Eight - 13

### Part A

The 2019 tax consequences would be as follows:

**Land** The Company would have a taxable capital gain on the Land calculated as follows:

Proceeds Of Disposition	\$800,000
Adjusted Cost Base	( 250,000)
Capital Gain	\$550,000
Inclusion Rate	1/2
Taxable Capital Gain	\$275,000

**Building** The Company would have a taxable capital gain and recapture calculated as follows:

Proceeds Of Disposition	\$2,400,000
Capital Cost	( 2,300,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

Opening UCC	\$1,105,000
Deduct Disposition - Lesser Of:	
Capital Cost = \$2,300,000	
Proceeds Of Disposition = \$2,400,000	( 2,300,000)
Negative Closing UCC Balance = Recapture	(\$1,195,000)
Recapture (Included In Income)	1,195,000
UCC - January 1, 2020	Nil

**Class 8** The Company would have recapture calculated as follows:

Opening UCC	\$178,645
Deduct Disposition - Lesser Of:	
Capital Cost = \$230,000	
Proceeds Of Disposition = \$200,000	( 200,000)
Negative Closing UCC Balance = Recapture	(\$ 21,355)
Recapture (Included In Income)	21,355
UCC - January 1, 2020	Nil

### Part B

**Land** With respect to the Land, the capital gain resulting from the use of the ITA 44(1) election would be the lesser of:

- \$550,000 (regular capital gain); and
- \$200,000 (the excess of the \$800,000 proceeds of disposition for the old land over the \$600,000 cost of the replacement land).

The taxable amount would be \$100,000 [(1/2)(\$200,000)] and this would be included in the revised 2019 Net Income For Tax Purposes. The original taxable capital gain of \$275,000 [(1/2)(\$550,000)] would be modified to reflect the election in the revised return.

If the ITA 44(1) election is used in 2020, the deemed adjusted cost base of the replacement land would be calculated as follows:

Actual Cost	\$600,000
Capital Gain Reversed By Election (\$550,000 - \$200,000)	( 350,000)
<u>Deemed Adjusted Cost Base Of Replacement Land</u>	<u>\$250,000</u>

Note that the deemed adjusted cost base of the replacement land has been reduced to the adjusted cost base of the old land.

**Building** If the ITA 44(1) election is used in 2020, the amended 2019 capital gain would be nil, the lesser of:

- \$100,000 (regular capital gain); and
- Nil (reflecting the fact that there was no excess of the \$2,400,000 proceeds of disposition for the old building over the \$2,480,000 cost of the replacement building).

Using this election will reduce the deemed capital cost for the building as follows:

Actual Cost	\$2,480,000
Capital Gain Reversed By Election	( 100,000)
<u>Deemed Capital Cost Of Replacement Building</u>	<u>\$2,380,000</u>

If the ITA 13(4) election is used in 2020, the amended 2019 recapture would be calculated as follows:

January 1, 2019 UCC Balance	\$1,105,000
Deduction:	
Lesser Of:	
• Proceeds Of Disposition = \$2,400,000	
• Capital Cost = \$2,300,000	(\$2,300,000)
Reduced By The Lesser Of:	
• Normal Recapture = \$1,195,000	
• Replacement Cost = \$2,480,000	1,195,000 (1,105,000)
<u>Recapture Of 2019 CCA (Amended)</u>	<u>Nil</u>

These new nil figures for the capital gain and the recapture on the disposition of the old building will replace the old figures of \$100,000 and \$1,195,000 that were included in the original 2019 return.

If both elections are used in 2020, the UCC of the replacement building is calculated as follows:

Deemed Capital Cost	\$2,380,000
Recapture Reversed By Election	( 1,195,000)
<u>UCC - Replacement Building</u>	<u>\$1,185,000</u>

Note that the \$1,185,000 UCC for the new building is equal to the UCC of the old building (\$1,105,000), plus the additional \$80,000 (\$2,480,000 - \$2,400,000) in funds required for its acquisition.

**Class 8 Assets** As this is a voluntary disposition, the ITA 13(4) and 44(1) elections can only be used on real property (land and buildings). They cannot be used on the Class 8 assets and, as a consequence, the \$21,355 in recapture will not be altered in the amended return. As the elections cannot be used, both the capital cost and the UCC of the new Class 8 assets will be \$275,000.

**Part C**

**The Election** The ITA 44(6) election applies when there is a disposition involving a combination of part land and part building. If, for either of the assets, the proceeds of disposition exceed the adjusted cost base, the election allows the transfer of all or part of that excess to the other asset.

As will be demonstrated in this problem, this can provide some relief when ITA 44(1) and ITA 13(4) fail to eliminate all of the capital gains arising on one part of the disposition of the old property. ITA 44(1) fully eliminated the capital gain on the building. However, a \$200,000 capital gain remained on the land. This would suggest that it could be advantageous to transfer some of the proceeds of disposition from the land to the building.

The excess of the proceeds of disposition of the old land over the cost of the replacement land was \$200,000 (\$800,000 - \$600,000). This is the amount of transfer that would be required to eliminate the capital gain on the land. However, the excess of the cost of the replacement building over the old building's proceeds of disposition is only \$80,000 (\$2,480,000 - \$2,400,000). If a transfer in excess of this amount is made, any reduction in the capital gain on the land will be matched by an increased capital gain on the building.

Applying ITA 44(6) in an optimal manner will result in the following adjusted proceeds of disposition:

	<b>Land</b>	<b>Building</b>
Actual Proceeds Of Disposition	\$800,000	\$2,400,000
Optimal Transfer Land To Building	( 80,000)	80,000
Adjusted Proceeds Of Disposition	\$720,000	\$2,480,000

**Application To Land** If both ITA 44(1) and ITA 44(6) are applied, the resulting capital gain on the land will be calculated as the lesser of:

- \$470,000 (\$720,000 - \$250,000); and
- \$120,000 (the excess of the \$720,000 adjusted proceeds of disposition for the old land over the \$600,000 cost of the replacement land).

This is a reduction of \$80,000 (\$200,000 - \$120,000) from the amount that was calculated when only ITA 44(1) was applied. However, the adjusted cost base of the land would be unchanged by the use of ITA 44(6):

Actual Cost	\$600,000
Capital Gain Reversed By Election (\$470,000 - \$120,000)	( 350,000)
Deemed Adjusted Cost Base Of Replacement Land	\$250,000

**Application To Building** With the proceeds of disposition transfer limited to \$80,000, the capital gain on the building is still nil. Specifically, the gain will be the lesser of:

- \$180,000 (\$2,480,000 - \$2,300,000); and
- Nil (reflecting the fact that there was no excess of the \$2,480,000 adjusted proceeds of disposition for the old building over the \$2,480,000 cost of the replacement building).

However, the capital cost and UCC of the building will be reduced by the application of ITA 44(6):

Actual Cost	\$2,480,000
Capital Gain Reversed By The Two Elections	( 180,000)
Deemed Capital Cost	\$2,300,000
Recapture Reversed By Election	( 1,195,000)
UCC - Replacement Building	\$1,105,000

The UCC of the replacement building is now equal to the UCC of the old building.

**Comparison** The table which follows compares the results of using only ITA 44(1) and ITA 13(4) with the results that arise when the ITA 44(6) election is also used.

	No ITA 44(6)	With ITA 44(6)
Capital Gains		
Land	\$200,000	\$120,000
Building	Nil	Nil
Replacement Property		
Adjusted Cost Base Of Land	\$ 250,000	\$ 250,000
Capital Cost Of Building	2,380,000	2,300,000
UCC	1,185,000	1,105,000

As you can see in the table, the use of ITA 44(6) has reduced the capital gain on the land by \$80,000. However, it has done so at the cost of reducing the capital cost and UCC of the replacement building. There is a tax cost associated with this trade off in that only one-half of the capital gain would have been taxed in the current year, whereas the future CCA that has been lost would be fully deductible.

## Solution to Assignment Problem Eight - 14

### Part A

The 2018 tax consequences of the involuntary disposition would include both taxable capital gains and recapture. The amounts would be calculated as follows:

	Land	Building
Proceeds Of Disposition:		
Sale Price Of Land	\$550,000	
Insurance Proceeds For Building		\$1,600,000
Adjusted Cost Base/Capital Cost	( 400,000)	( 1,382,000)
Capital Gain	\$150,000	\$ 218,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 75,000	\$ 109,000
January 1, 2018 UCC Balance		\$ 985,926
Lesser Of:		
• Cost = \$1,382,000		
• Proceeds Of Disposition = \$1,600,000		( 1,382,000)
December 31 UCC Balance		(\$ 396,074)
Recapture		396,074
January 1, 2019 UCC		Nil

For the year ending December 31, 2018, there is no CCA claim. Instead, there is \$396,074 in recaptured CCA that must be taken into income.

As a result of this involuntary disposition, Kontex will have an addition to 2018 Net Income For Tax Purposes of \$580,074 (\$75,000 + \$109,000 + \$396,074).

### Part B

After the land and building are replaced in the year ending December 31, 2019, an election can be made under ITA 44(1), and an amended return can be filed for 2018. In the amended return, the capital gains will be nil, the lesser of the amounts calculated in Part A and the following:

	Land	Building
Proceeds Of Disposition	\$550,000	\$1,600,000
Less: Cost Of Replacement Property	( 800,000)	( 1,700,000)
Excess, If Any	Nil	Nil

The reversed amounts will have to be removed from the capital costs of the new assets, resulting in the following revised capital cost values:

	New Land	New Building
Cost	\$800,000	\$1,700,000
Capital Gain Reversed By Election	( 150,000)	( 218,000)
Deemed Cost	\$650,000	\$1,482,000

These values can also be calculated by taking the old adjusted capital costs of \$400,000 and \$1,382,000, and adding the additional funds required to replace the old assets (\$250,000 for the land and \$100,000 for the building).

An election can also be made under ITA 13(4) to amend the 2018 recapture to nil. The calculation would be as follows:

January 1, 2018 UCC Balance		\$985,926
Deduction:		
Lesser Of:		
• Proceeds Of Disposition = \$1,600,000		
• Capital Cost = \$1,382,000	\$1,382,000	
Reduced By The Lesser Of:		
• Normal Recapture = \$396,074		
• Replacement Cost = \$1,700,000	( 396,074)	( 985,926)
Recapture Of 2018 CCA (Amended)		Nil

The UCC of the new building will be adjusted for this change as follows:

Deemed Capital Cost Of Building (See Preceding Calculation)	\$1,482,000
Recapture Reversed - ITA 13(4) Election	( 396,074)
UCC	\$1,085,926

This \$1,085,926 can also be calculated as the old UCC of \$985,926, plus the \$100,000 (\$1,700,000 - \$1,600,000) in funds invested by Kontex in excess of the insurance proceeds.

**Part C**

The CCA claim for the fiscal year ending December 31, 2019 would be calculated as follows:

Opening UCC Balance	Nil
Addition of New Building UCC	\$1,085,926
Accll Adjustment	542,963
CCA Base	\$1,628,889
Enhanced Rate For New Class 1 Non-Residential Buildings	6%
CCA For 2019	\$ 97,733

## Solution to Assignment Problem Eight - 15

### Part A - Net Income For Tax Purposes

**Property Income** Owen's property income can be calculated as follows:

Eligible Dividends	\$42,400
Gross Up On Eligible Dividends [(38%)(\$42,400)]	16,112
Non-Eligible Dividends	22,000
Gross Up On Non-Eligible Dividends [(15%)(22,000)]	3,300
Net Rental Income (Note 1)	700
ReCan Distribution [(1,000)(2.00 - 0.75)]	1,250
<b>Total Property Income</b>	<b>\$85,762</b>

**Note 1** Net rental income can be calculated as follows:

Gross Rents [(10)(4,000)]	\$40,000
Expenses Other Than CCA	( 23,600)
<b>Income Before CCA</b>	<b>\$16,400</b>
<b>CCA</b>	
Building (See Following Calculation) (\$ 3,100)	
Furnishings [(20%)(150%)(42,000)] ( 12,600)	( 15,700)
<b>Net Rental Income</b>	<b>\$ 700</b>
Original Cost Of Building (\$215,000 - \$65,000)	\$150,000
Fair Market Value At Change In Use (\$235,000 - \$75,000)	\$160,000
Original Cost	( 150,000)
Excess	\$ 10,000
Bump Up For CCA Purposes 50%	5,000
<b>Cost For UCC And CCA Purposes</b>	<b>\$155,000</b>
One-Half Net Additions [(1/2)(155,000)]	( 77,500)
<b>CCA Base</b>	<b>\$ 77,500</b>
Rate	4%
<b>CCA - Class 1</b>	<b>\$ 3,100</b>

**Capital Gains** Owen's taxable capital gains (allowable capital losses) can be calculated as follows:

Eligible Small Business Corporation Shares (Note 2)	\$ 13,333
House And Cottage (Note 3)	16,364
ReCan Units (Note 4)	( 393)
Land (Note 5)	2,500
Debit Agricole Shares (Note 6)	( 4,678)
Power Boat (Note 7)	15,373
Net Gain On Stamp Collection And Oil Painting (Note 8)	1,000
<b>Net Capital Gains</b>	<b>\$43,499</b>
Inclusion Rate	1/2
<b>Net Taxable Capital Gains</b>	<b>\$21,750</b>

**Note 2** The capital gain to be recognized on the sale of eligible small business shares can be calculated as follows:

Proceeds Of Disposition	\$600,000
Adjusted Cost Base	( 520,000)
Capital Gain	\$ 80,000
Deferral (See Following Calculation)	( 66,667)
Capital Gain To Be Recognized	\$ 13,333

If Owen had invested all of the proceeds in a different eligible small business corporation, the entire \$80,000 gain could be deferred. However, since he only used \$500,000 of the proceeds for re-investment, the deferral is limited to \$66,667 [(\$80,000)(\$500,000 ÷ \$600,000)]. Note that the adjusted cost base of the new eligible small business corporation shares is reduced by the deferred gain to \$433,333 (\$500,000 - \$66,667).

**Note 3** While there is a gain on both the sale of the house and the deemed disposition of the cottage, the principal residence exemption can be applied against either or both of these properties. The relevant calculations are as follows:

	House	Cottage
Proceeds Of Disposition (Deemed)	\$375,000	\$235,000
Adjusted Cost Base	( 320,000)	( 215,000)
Selling Costs	( 20,000)	N/A
Capital Gain	\$ 35,000	\$ 20,000

As the house was owned for 16 years, the annual gain on this property is \$2,187.50 (\$35,000 ÷ 16). The annual gain on the cottage, owned for 11 years, is \$1,818.18 (\$20,000 ÷ 11).

As the annual gain on the house is larger, the maximum number of required years should be applied to that property. This would be the 15 years 2004 through 2018, leaving the year 2019 for the cottage. The results are as follows:

	House	Cottage
Pre-Exemption Gain	\$35,000	\$20,000
Exemption:		
House [(\$35,000)(15 + 1) ÷ 16]	( 35,000)	
Cottage [(\$20,000)(1 + 1) ÷ 11]		( 3,636)
Capital Gain After Exemption	Nil	\$16,364

**Note 4** The total distribution by this trust was \$2,000 [(1,000)(\$2)]. At a price of \$42 per unit, this would result in Owen acquiring an additional 47.62 (2,000 ÷ \$42) units, giving him a total holding of 1,047.62 (1,000 + 47.62) units. Based on this, the capital loss on the sale of the trust units would be calculated as follows:

Proceeds Of Disposition [(1,047.62)(\$39.00)]		\$40,857
Adjusted Cost Base		
Original Cost [(1,000)(\$40)]	\$40,000	
Additional Investment	2,000	
Return Of Capital [(1,000)(\$0.75)]	( 750)	( 41,250)
Capital Loss		(\$ 393)

**Note 5** Since the land had not been used to earn income, the undeducted property taxes could not be added to the adjusted cost base of the land. The capital gain on the 2018 sale of the land would be calculated as follows:

Proceeds Of Disposition	\$125,000
Adjusted Cost Base	( 100,000)
<u>Capital Gain Before Reserve</u>	<u>\$ 25,000</u>

At the end of 2018, the uncollected proceeds are \$87,500 (\$125,000 - \$37,500). Given this, the 2018 capital gain reserve was \$17,500, the lesser of:

- $[(\$25,000)(\$87,500 \div \$125,000)] = \$17,500$
- $[(\$25,000)(20\%)(4 - 0)] = \$20,000$

At the end of 2019, the uncollected proceeds are unchanged at \$37,500. Based on this, the capital gain to be recognized for 2019 would be as follows:

2018 Reserve Added To Income	\$17,500
2019 Reserve - Lesser Of:	
$[(\$25,000)(\$87,500 \div \$125,000)] = \$17,500$	
$[(\$25,000)(20\%)(4 - 1)] = \$15,000$	( 15,000)
<u>2019 Capital Gain</u>	<u>\$ 2,500</u>

**Note 6** The cost of Owen's purchases of the Debit Agricole shares, converted to Canadian dollars, is as follows:

<b>Purchase/Sale Date</b>	<b>Cost In Canadian Dollars</b>
October 1, 2016 Purchase $[(1,000)(€14.00)(\$1.57)]$	\$21,980
November 4, 2017 Purchase $[(300)(€14.50)(\$1.55)]$	6,743
Sub-Total	\$28,723
January 6, 2018 Sale $[(400)(\$28,723 \div 1,300)]$ (Rate Irrelevant)	( 8,838)
Sub-Total (900 Shares)	\$19,885
June 24, 2019 Purchase $[(600)(€15.50)(\$1.51)]$	14,043
<u>Adjusted Cost Base On December 2, 2019</u>	<u>\$33,928</u>

There would be a capital loss on the sale of the 1,500 shares, calculated as follows:

Proceeds Of Disposition $[(1,500)(€13.00)(\$1.50)]$	\$29,250
Adjusted Cost Base	( 33,928)
<u>Capital Loss</u>	<u>(\$ 4,678)</u>

Since Owen immediately converts the Euros to dollars, there is no gain or loss on the foreign currency conversion.

**Note 7** The power boat would be designated as personal use property. While losses on such property are not deductible, gains are taxable. The capital gain would be calculated as follows:

Proceeds Of Disposition	\$50,000
Original Cost	(\$10,000)
Restoration Costs	( 24,627)
<u>Capital Gain</u>	<u>\$15,373</u>

**Note 8** The net capital gain on listed personal property would be calculated as follows:

	<b>Stamp Collection</b>	<b>Oil Painting</b>
Proceeds Of Disposition (\$1,000 Floor)	\$12,000	\$1,000
Adjusted Cost Base	( 8,000)	( 4,000)
Capital Gain (Loss)	\$ 4,000	(\$3,000)

As losses on listed personal property can be deducted against gains on listed personal property, the net inclusion is \$1,000 (\$4,000 - \$3,000).

Based on the preceding calculations, Owen's Net Income For Tax Purposes can be calculated as follows:

Property Income	\$85,762
Net Taxable Capital Gains	21,750
Net Income For Tax Purposes	\$107,512

**Part B - Taxable Income**

As Owen has no deductions from Net Income For Tax Purposes, his Taxable Income is equal to his Net Income For Tax Purposes.

**Part C - Tax Payable**

Owen's federal Tax Payable would be calculated as follows:

Tax On First \$95,259		\$16,908
Tax On Next \$12,253 (\$107,512 - \$95,259) At 26 Percent		3,186
Tax Payable Before Credits		\$20,094
Tax Credits:		
Basic Personal Amount	(\$12,069)	
Spousal (\$12,069 - \$7,650)	( 4,419)	
Canada Caregiver - Philip Is Not Infirm	Nil	
Volunteer Search And Rescue	( 3,000)	
Transfer Of Tuition - Lesser Of:		
• Absolute Limit Of \$5,000		
• Actual Tuition Of \$11,400	( 5,000)	
Medical Expenses (Note 9)	( 1,323)	
Credit Base	(\$25,811)	
Rate	15%	( 3,872)
Charitable Donations (Note 10)		
[(15%)(200) + (29%)(5,000 - 200)]		( 1,422)
Dividend Tax Credits:		
Eligible Dividends [(38%)(6/11)(42,400)]		( 8,788)
Non-Eligible Dividends [(15%)(9/13)(22,000)]		( 2,285)
Federal Tax Payable		\$ 3,727

**Note 9** All of the \$5,475 of services paid for by Owen would be eligible medical expenses, with the exception of his tummy tuck surgery which would appear to be cosmetic. Given this, the available credit would be calculated as follows:

Eligible Expenses (\$5,475 - \$1,800)	\$3,675
Reduced By The Lesser Of:	
• [(3%)(\$107,512)] = \$3,225	
• 2019 Threshold Amount = \$2,352	( 2,352)
Allowable Medical Costs	\$1,323

**Note 10** As none of his income is taxed at 33 percent, this rate will not be applicable to the calculation of the charitable donations tax credit.

## Solution to Assignment Problem Eight - 16

### Employment Income

Jasperina's net employment income is calculated as follows:

Salary	\$252,000
RPP Contributions	( 3,200)
Christmas Basket (< \$500)	Nil
<b>Net Employment Income</b>	<b>\$248,800</b>

If an employer pays the tuition for a course that is directly related to the recipient's employment, it is not considered a taxable benefit.

### Business Income

The required calculations here would be as follows:

Accounting Net Income (Note 1)	\$133,656
Amortization Expense	16,900
Non-Deductible Meals And Entertainment [(50%)(1,500)]	750
Disability Related Modifications (Note 2)	( 11,200)
CCA (Note 2)	( 49,428)
<b>Net Business Income</b>	<b>\$ 90,678</b>

**Note 1** The property tax and rent for both units would be deductible, as well as the mortgage interest.

**Note 2** Disability related modifications are deductible under ITA 20(1)(qq). The same amount would not qualify as an addition to Class 1. The net result is that the \$11,200 is a fully deductible business expense and the building additions of \$78,200 are reduced by \$11,200 to \$67,000.

The CCA totals \$49,428 (\$39,150 + \$10,278) calculated as follows:

#### Class 1

Addition (\$368,000 + \$78,200 - \$11,200)	\$435,000
Accll Adjustment	217,500
CCA Base	\$652,500
CCA At 6 Percent (Non-residential Use)	( 39,150)
Accll Adjustment Reversal	( 217,500)
<b>January 1, 2020 UCC Balance (Not Required)</b>	<b>\$395,850</b>

#### Class 8

January 1, 2019 UCC Balance		\$16,888
Additions	\$28,000	
Dispositions - Lesser Of:		
• Proceeds = \$5,000		
• Cost = \$23,000	( 5,000)	23,000
Accll Adjustment		11,500
CCA Base		\$51,388
CCA At 20 Percent		( 10,278)
Accll Adjustment Reversal		( 11,500)
<b>January 1, 2020 UCC Balance (Not Required)</b>		<b>\$29,610</b>

**Property Income**

The required calculations here would be as follows:

Eligible Dividends		\$45,123
Gross Up On Eligible Dividends [(38%)(45,123)]		17,147
Income Trust Distribution (Return Of Capital)		Nil
Net Rental Income (Note 3)		5,430
<b>Net Property Income</b>		<b>\$67,700</b>

**Note 3** As the change in use is from personal to business, the base for calculating CCA would be as follows:

Cost Of Building (\$165,000 - \$40,000)		\$125,000
Fair Market Value At Change In Use		
(\$280,000 - \$66,000)	\$214,000	
Cost \$165,000 - \$40,000)	( 125,000)	
Increase In Value	\$ 89,000	
Inclusion Factor	1/2	44,500
<b>Cost For UCC And CCA Purposes</b>		<b>\$169,500</b>
One-Half Net Additions		( 84,750)
<b>CCA Base</b>		<b>\$ 84,750</b>
Rate For Class 1		4%
<b>CCA</b>		<b>\$ 3,390</b>

Using this CCA figure, net rental income would be \$8,820 (\$8,820 - \$3,390).

**Net Taxable Capital Gains**

The required calculations here would be as follows:

Schwartz Income Trust (Note 4)		\$26,107
Land Sale (\$400,000 - \$233,000)	\$167,000	
Reserve For Land Sale (Note 5)	( 104,375)	62,625
Paintings [(3)(10,000 - \$1,000)] (Note 6)		27,000
Change In Use:		
Chalet - Land (\$66,000 - \$40,000)	\$ 26,000	
Chalet - Building (\$214,000 - \$125,000)	89,000	115,000
<b>Net Capital Gains</b>		<b>\$230,732</b>
Inclusion Rate		1/2
<b>Net Taxable Capital Gains</b>		<b>\$115,366</b>

**Note 4** The \$6,400 (2,000 @ \$3.20) income trust distribution was used to acquire 426.67 additional units (\$6,400 ÷ \$15). Using this figure, the capital gain calculation would be as follows:

Proceeds Of Disposition [(2,426.67)(19)]		\$46,107
Adjusted Cost Base		
[(2,000)(10) - \$6,400 ROC + \$6,400]	( 20,000)	
<b>Capital Gain</b>		<b>\$26,107</b>

**Note 5** The gain on the land would be \$167,000 (\$400,000 - \$233,000). The maximum reserve would be \$104,375, the lesser of:

- \$104,375 [(\$167,000)(\$250,000 ÷ \$400,000)]
- \$133,600 [(\$167,000)(20%)(4 - 0)]

**Note 6** As her father hadn't sold any paintings during his life, the fair market value of his paintings at the time of the gifts would have been nil. As a result, the adjusted cost base for the paintings would normally be nil. However, the paintings are listed personal property and, given this, the minimum adjusted cost base is deemed to be \$1,000. The capital gain calculation on the painting traded for the electrician's services would be the same as for the paintings sold for cash.

### **Net And Taxable Income**

The required calculations here would be as follows:

Net Employment Income	\$248,800
Net Business Income	90,678
Net Property Income	67,700
Net Taxable Capital Gains	115,366
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$522,544</b>

### **Federal Tax Payable**

The required calculations here would be as follows:

Tax On First \$210,371		\$ 48,719
Tax On Next \$312,173 (\$522,544 - \$210,371) At 33 Percent		103,017
<b>Tax Before Credits</b>		<b>\$151,736</b>
<b>Tax Credits:</b>		
Basic Personal Amount	(\$12,069)	
Eligible Dependant (\$12,069 - \$1,200)	( 10,869)	
Canada Caregiver For Child	( 2,230)	
Transfer Of Disability	( 8,416)	
Disability Supplement	( 4,909)	
EI	( 860)	
CPP	( 2,749)	
Canada Employment Credit	( 1,222)	
<b>Total Credit Base</b>	<b>(\$43,324)</b>	
Rate	15%	( 6,499)
<b>Subtotal</b>		<b>\$145,237</b>
Dividend Tax Credit [(6/11)(\$17,147)]		( 9,353)
<b>Federal Tax Payable</b>		<b>\$135,884</b>

The cost of renovations Jasperina has done to make her business property more accessible would not be eligible for the home accessibility credit. To be eligible, the costs have to be paid to improve a residence.

Jasperina claimed the Canada caregiver amount for a child which precluded her from including the infirm amount of \$2,230 when claiming Louis as an eligible dependant.

## CHAPTER NINE SOLUTIONS

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### Solution to Assignment Problem Nine - 1

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ITA 56(1)(a)(iii) requires the inclusion of death benefits in income in the year in which they are received. However, ITA 248 defines these benefits in a manner that allows the exclusion of the first \$10,000 of a death benefit paid to a surviving spouse or other parties.

The payments will result in the following inclusions in Mark Li's Net Income For Tax Purposes:

- 2019 = Nil
- 2020 = Nil
- 2021 = \$2,000 (\$4,000 + \$4,000 + \$4,000 - \$10,000)

After the first \$10,000 in death benefits is received tax free, any subsequent death benefits received will be fully taxable to Mr. Li.

The death benefit will have no effect on the Net Income For Tax Purposes of Ms. Li for any year.

## Solution to Assignment Problem Nine - 2

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The allowable moving expenses can be calculated as follows:

First Trip Hotel And Food After Acquiring New Residence [4 Days At \$201 (\$150 + \$51)]		\$	804
Selling Costs Of Old Residence (\$9,500 + \$1,400)			10,900
Acquisition Cost Of New Residence (\$1,850 + \$600)			2,450
Halifax Hotel And Food [3 days At \$191 (\$140 + \$51)]			573
Expenses Of Travel To Regina:			
Milage [(\$0.58)(3,900 Km.)]	\$2,262		
Hotel (7 Days At \$140)	980		
Food (7 Days At \$51)	<u>357</u>		3,599
Moving Company Fees			3,800
Hotel And Food In Regina [(8 Days)[\$140 + \$51]]			1,528
Total Allowable Expenses			\$23,654
Employment Income In New Location			( 16,500)
Carry Forward			<u>\$ 7,154</u>

### Notes:

1. With respect to the first trip, only the cost of meals and lodging that occurred after the acquisition of the new residence would be allowed. The airfare, the cost of car rentals, and the cost of meals and lodging prior to the acquisition of the new residence would not be deductible.
2. The taxes on the old home to the date of sale would not be an allowable moving expense.
3. Food and lodging costs near the old or new residences are limited to 15 days in total. For Ms. Fox, this would include 4 days on her first trip to Regina, the 3 days in Halifax, but only 8 of the 16 days during which she lived in a hotel on arriving in Regina. Note that the 7 days spent travelling to Regina are not included in the 15 day total.
4. The storage costs are deductible.
5. The unused moving cost balance of \$7,154 can be carried forward and applied against employment income earned at the new location in a subsequent year.

## Solution to Assignment Problem Nine - 3

### Marco

Child care costs are normally deducted by the spouse with the lower Net Income For Tax Purposes. While only Marco's employment income is considered Earned Income for purposes of determining the child care cost deduction, his overall Net Income For Tax Purposes is higher than Valentina's, making her the lower income spouse. However, during the 14 week period when Valentina is attending the human resources course, Marco can deduct such costs. The maximum deduction would be calculated as follows:

	Case A	Case B
Actual Payments [(\$350)(50)]	\$17,500	\$17,500
2/3 Of Earned Income* [(2/3)(\$42,000)]	\$28,000	\$28,000
Annual Expense Limit:		
Case A [(3)(\$8,000)]	\$24,000	
Case B [(2)(\$8,000) + (2)(\$5,000)]		\$26,000
Periodic Expense Limit:		
Case A [(3)(\$200)(14 weeks)]	\$ 8,400	
Case B {[ (2)(\$200)(14 weeks)] + [(2)(\$125)(14 weeks)]}		\$ 9,100

\*Only Marco's employment income is relevant to this calculation.

In both Case A and Case B, the Periodic Expense Limit is the least of the four figures. This provides for a deduction of \$8,400 in that Case A, and at \$9,100 in Case B.

### Valentina

The calculations for Valentina are as follows:

	Case A	Case B
Actual Payments [(\$350)(50)]	\$17,500	\$17,500
2/3 Of Earned Income [(2/3)(\$81,000)]*	\$54,000	\$54,000
Annual Expense Limit:		
Case A [(3)(\$8,000)]	\$24,000	
Case B [(2)(\$8,000) + (2)(\$5,000)]		\$26,000

\*Earned Income is based on gross employment income, before the deduction of the RPP contributions.

The lowest figure in both Case A and Case B is the \$17,500 of actual child care payments.

Given this, Valentina's deduction is \$9,100 (\$17,500 - \$8,400) in Case A, and \$8,400 (\$17,500 - \$9,100) in Case B.

## Solution to Assignment Problem Nine - 4

### Part A - Net And Taxable Income

Felipe's Income	Alternative 1	Alternative 2
Net Rental Income	\$ 25,000	\$ 25,000
Pension Income (RRIF Withdrawal)	84,000	84,000
Pension Income To Martina	N/A	( 42,000)
OAS	N/A	7,400
Net Income Before OAS Clawback	\$109,000	\$ 74,400
OAS Clawback (Notes 1 and 2)	N/A	N/A
Net And Taxable Income	\$109,000	\$ 74,400

Martina's Income	Alternative 1	Alternative 2
OAS	\$ 7,400	\$ 7,400
Eligible Dividends Received	35,000	35,000
Gross Up [(38%)(35,000)]	13,300	13,300
Pension Income From Felipe	N/A	42,000
Net Income Before OAS Clawback	\$55,700	\$97,700
OAS Clawback (Note 3)	Nil	( 3,018)
Net And Taxable Income	\$55,700	\$94,682

**Note 1** As Felipe did not apply for OAS in Alternative 1, there can be no clawback. Martina's income is below the OAS clawback threshold of \$77,580.

**Note 2** In Alternative 2, Felipe's Net Income is less than the clawback income threshold of \$77,580 so there is no clawback.

**Note 3** With pension income splitting, the OAS clawback for Martina would be the lesser of \$7,400 and \$3,018 [(15%)(97,700 - \$77,580)].

### Part B - Alternative 1

Without pension income splitting, Felipe's Amount Owing would be calculated as follows:

Tax On First \$95,259		\$16,908
Tax On Next \$13,741 (\$109,000 - \$95,259) At 26%		3,573
Total Before Credits		\$20,481
Credits:		
Basic Personal	(\$12,069)	
Age [\$7,494 - (15%)(109,000 - \$37,790)]	Nil	
Pension	( 2,000)	
Medical Expenses*	( 16,348)	
Total	(\$30,417)	
Rate	15%	( 4,563)
Federal Tax Payable		\$15,918
OAS Clawback		N/A
Total Amount Owing - Felipe		\$15,918

\*The credit for medical expenses would be calculated as follows:

Total		\$18,700
Lesser Of:		
• [(3%)(109,000)] = \$3,270		
• 2019 Threshold Amount = \$2,352		( 2,352)
Credit Base		\$16,348

Without pension income splitting, Martina's Amount Owing would be calculated as follows:

Tax On First \$47,630		\$7,145
Tax On Next \$8,070 (\$55,700 - \$47,630 At 20.5%)		1,654
Total Before Credits		\$8,799
Credits:		
Basic Personal	(\$12,069)	
Age [\$7,494 - (15%)(55,700 - 37,790)]	( 4,808)	
Total	(\$16,877)	
Rate	15%	( 2,532)
Dividend Tax Credit [(6/11)(13,300)]		( 7,255)
Total Amount Owing - No Clawback - Martina		Nil

**Part B - Alternative 2**

With pension income splitting and the OAS payments, Felipe's Amount Owing would be calculated as follows:

Tax On First \$47,630		\$ 7,145
Tax On Next \$26,770 (\$74,400 - \$47,630) At 20.5%		5,488
Tax Before Credits		\$12,633
Credits:		
Basic Personal	(\$12,069)	
Age [\$7,494 - (15%)(74,400 - 37,790)]	( 2,003)	
Pension	( 2,000)	
Medical Expenses*	( 16,468)	
Total	(\$32,540)	
Rate	15%	( 4,881)
Total Amount Owing - No Clawback - Felipe		\$ 7,752

\*The credit for medical expenses would be calculated as follows:

Total		\$18,700
Lesser Of:		
• [(3%)(74,400)] = \$2,232		
• 2019 Threshold Amount = \$2,352		( 2,232)
Credit Base		\$16,468

With pension income splitting, Martina's Amount Owing would be calculated as follows:

Tax On First \$47,630		\$7,145
Tax On Next \$47,052 (\$94,682 - \$47,630) At 20.5%		9,646
<hr/>		
Tax Before Credits		\$16,791
Credits:		
Basic Personal	(\$12,069)	
Age [\$7,494 - (15%)(94,676 - 37,790)]	Nil	
Pension	( 2,000)	
<hr/>		
Total	(\$14,069)	
Rate	15%	( 2,110)
<hr/>		
Dividend Tax Credit [(6/11)(\$13,300)]		( 7,255)
<hr/>		
Federal Tax Payable		\$ 7,426
OAS Clawback		3,018
<hr/>		
Total Amount Owing - Martina		\$10,444
<hr/>		

### **Part B - Comparison Of After Tax Cash**

This amount would be calculated as follows:

Amount Owing - Alternative 1		\$15,918
Amount Owing - Alternative 2 (\$7,752 + \$10,444)	(\$18,196)	
OAS Benefits Received - Alternative 2	7,400	( 10,796)
<hr/>		
Cash Advantage (Disadvantage) - Alternative 2		\$ 5,122
<hr/>		

In this situation, pension income splitting has resulted in a significant increase in the couple's combined cash retained. The most important factor in this improvement was the fact that Felipe was able to retain his OAS payments of \$7,400. If he had received these payments and the couple had not used pension income splitting, most of this \$7,400 would have been clawed back.

We would note, however, that Alternative 2 may not be the best solution. Finding the optimum solution is not an intuitive process and would require the proper use of tax software.

### **Part C - Medical Expenses Claimed By Lower Income Spouse**

Martina is the lower income spouse under Alternative 1. While her low income would result in a larger base for the credit, her claim would be wasted. Her other credits are sufficient to wipe out all of her Tax Payable without using the medical expense credit.

Having Martina claim the medical expenses would prevent Felipe from claiming them. As a result his Amount Owing would increase by \$2,452 [(15%)(16,348)] with no corresponding decrease in Martina's Amount Owing.

Under Alternative 2, Felipe is the lower income spouse, so there would be no change in the solution.

## Solution to Assignment Problem Nine - 5

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The minimum Net Income For Tax Purposes that can be reported by Ms. Houde is calculated as follows:

Spousal Support [(12)(\$1,500)]		\$18,000
Child Support (Not Taxable)		Nil
Timmins Employment Income	\$8,000	
Moving Costs To Timmins (Note 1)	<u>( 1,200)</u>	6,800
London Employment Income	\$1,600	
Moving Costs To London (Note 1)	<u>1,350</u>	250
Scholarship Received	\$4,300	
Exempt Portion Of Scholarship (100%)	<u>( 4,300)</u>	Nil
Eligible Dividends Received		2,600
Gross Up Of Dividends [(38%)(\$2,600)]		988
Inheritance (Not Taxable)		Nil
TFSA Withdrawal (Not Deductible)		Nil
RESP Contributions (Not Deductible)		Nil
Child Care Costs (Note 2)		<u>( 5,850)</u>
Net Income For Tax Purposes		<u>\$22,788</u>

**Note 1** The cost of the move to Timmins is deductible against the income that was earned there as it is more than 40 km from London. Similarly, the costs of moving back to London can be deducted against her employment income in that city.

**Note 2** Viva's deduction is the least of the following amounts:

- The amount paid = \$5,850 (\$1,950 + \$1,725 + \$2,175)
- The annual child care expense amount = \$10,000 [(2)(\$5,000)].
- Two-thirds of Earned Income = \$6,400 [(2/3)(\$8,000 + \$1,600)].

## Solution to Assignment Problem Nine - 6

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### Case A

As the shares are sold to a non-arm's length party for less than their fair market value, ITA 69 is in effect, resulting in a deemed disposition at fair market value. This will result in a taxable capital gain of \$103,000  $[(1/2)(\$426,000 - \$220,000)]$ . The adjusted cost base to her daughter will be the actual cost of \$220,000.

### Case B

Under ITA 69, a gift to a related party is treated as a deemed disposition at fair market value. This means that there will be a taxable capital gain of \$103,000  $[(1/2)(\$426,000 - \$220,000)]$  for Ms. Wales. The adjusted cost base to her son, Jerry, will be the fair market value of \$426,000.

### Case C

Ms. Wales will have a taxable capital gain of \$140,000  $[(1/2)(\$500,000 - \$220,000)]$ . However, because the non-arm's length sale was at a price in excess of fair market value, ITA 69 limits Jeff's adjusted cost base to the fair market value of \$426,000.

### Summary

These results can be summarized as follows:

	Taxable Capital Gain To Ms. Wales	ACB To Transferee
Case A	\$103,000	\$220,000
Case B	\$103,000	\$426,000
Case C	\$140,000	\$426,000

## Solution to Assignment Problem Nine - 7

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### Asset 1

The results of this disposition for Joan can be calculated as follows:

UCC Balance	\$103,883
Deduct The Lesser Of:	
Proceeds Of Disposition = \$115,000	
Capital Cost = \$150,000	( 115,000)
<hr/>	
Negative Ending UCC Balance = Recapture Of CCA	(\$ 11,117)
<hr/>	

Joan's Net Income For Tax Purposes will increase by \$11,117.

In this case, where the fair market value of the asset is less than its capital cost, ITA 13(7)(e) deems the transferee's capital cost of the transferred asset to be equal to the transferor's capital cost, an amount of \$150,000. This capital cost will be used for purposes of determining any capital gain and/or recapture on a future disposition.

The \$35,000 (\$150,000 - \$115,000) difference between this value and the transfer price will be considered deemed CCA. The resulting UCC balance of \$115,000 will be used by Joan's sister for calculating future CCA.

Since Joan was taxed on the \$11,117 difference between her UCC of \$103,883 and the fair market value of \$115,000 as recapture, it makes economic sense that her sister's UCC balance should be \$115,000.

### Asset 2

The results of the disposition for Joan can be calculated as follows:

UCC Balance	\$58,310
Deduct The Lesser Of:	
Proceeds Of Disposition = \$35,000	
Capital Cost = \$140,000	( 35,000)
<hr/>	
Positive Ending UCC Balance No Assets = Terminal Loss	\$23,310
<hr/>	

As there is a positive balance in the UCC class and no assets left in the class, the \$23,310 is a terminal loss that can be deducted against any other source of income.

In this case, where the fair market value of the asset is less than its capital cost, ITA 13(7)(e) deems the transferee's capital cost of the transferred asset to be equal to the transferor's capital cost, an amount of \$140,000. This capital cost will be used for purposes of determining any recapture or capital gain (unlikely in this situation) on a future disposition.

For Joan's father, his UCC balance is the transfer price of \$35,000 with the \$105,000 (\$140,000 - \$35,000) difference between her capital cost and the transfer price of \$35,000 considered to be deemed CCA.

**Asset 3**

The results of the disposition for Joan can be calculated as follows:

UCC Balance	\$82,369
Deduct The Lesser Of:	
Proceeds Of Disposition = \$107,000	
Capital Cost = \$95,000	( 95,000)
<hr/>	
Negative Ending UCC Balance = Recapture Of CCA	(\$12,631)
<hr/>	
Proceeds Of Disposition	\$107,000
Capital Cost	( 95,000)
<hr/>	
Capital Gain	\$ 12,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain	\$ 6,000
<hr/>	

Joan's Net Income For Tax Purposes will increase by \$18,631 (\$12,631 + \$6,000).

For Joan's mother, her capital cost for capital gains purposes will be the transfer price of \$107,000. However, because the fair market value of the asset exceeded its original capital cost, ITA 13(7)(e) will limit the value used for CCA and recapture calculations to the following amount:

$$[\$95,000 + (1/2)(\$107,000 - \$95,000)] = \$101,000$$

## Solution to Assignment Problem Nine - 8

### Case A - Transfer To Spouse At Death

Whenever a taxpayer dies, there is a deemed disposition of all of his property. If the transfer is to a spouse, the disposition is deemed to have taken place at the adjusted cost base of capital property other than depreciable property, or at the UCC of depreciable property. This would mean that there would be no immediate tax consequences associated with Mr. Caswell's death in this Case, where all of the property is transferred to his spouse.

With respect to the tax base of the various assets in the hands of his spouse, they would be unchanged by the transfer.

It is possible, after Mr. Caswell's death, for his legal representative to elect to have assets transferred to his spouse at fair market values. This would result in taxable capital gains and other income being included in his final tax return. Although the fair market value elections are available, the problem states that none were made.

### Case B - Transfer To Son At Death

This Case is more complex and would follow the general rules applicable to transfers made at death to anyone other than a spouse. For both depreciable and non-depreciable property, other than farm property, the transfer will be deemed to have taken place at fair market value.

**Farm Land** In the case of farm land that is being used by the taxpayer or a member of his family, ITA 70(9.01) permits a tax free transfer of such property to a child, at the time of death. The deemed proceeds would be Mr. Caswell's adjusted cost base, resulting in no tax consequences for his estate. As you would expect, the adjusted cost base to Mr. Caswell's son, John, would be the same \$325,000 that was deemed to be the proceeds of the disposition on Mr. Caswell's death.

**Rental Property** In the case of the rental property, the deemed proceeds would be \$158,000, resulting in Taxable Income of \$47,000 for Mr. Caswell's estate. This would be calculated as follows:

	Land	Building
Deemed Proceeds Of Disposition	\$25,000	\$133,000
Adjusted Cost Base/Capital Cost	( 25,000)	( 95,000)
Capital Gain	Nil	\$ 38,000
Inclusion Rate	N/A	1/2
Taxable Capital Gain	Nil	\$ 19,000
UCC		\$ 67,000
Deduct Disposition - Lesser Of:		
• Capital Cost (\$120,000 - \$25,000) = \$95,000		
• Deemed Proceeds (\$158,000 - \$25,000) = \$133,000		( 95,000)
Negative Closing UCC Balance = Recaptured CCA		(\$ 28,000)

With respect to his son's tax records, adjusted cost base of the land is unchanged at \$25,000. In addition, the building will be a Class 1 asset with a capital cost and UCC of \$133,000. In calculating future CCA, two things should be noted:

- ITA 13(7)(e) does not apply to deemed dispositions resulting from the death of a taxpayer. This provision normally limits the UCC for the acquiring taxpayer to the selling taxpayer's capital cost, plus one-half of the difference between the proceeds of disposition and the taxpayer's capital cost.
- Since the acquisition of the building is a non-arm's length transaction and its previous use was to produce income, it is exempt from the half-year rules.

**Shares** In the case of the General Industries shares and the shares of a Canadian controlled private corporation, the deemed proceeds would be the fair market value and this would also be John's adjusted cost base. The tax consequences to Mr. Caswell's estate would be as follows:

	<b>General Industries</b>	<b>Caswell Enterprises</b>
Deemed Proceeds	\$350,000	\$426,000
Adjusted Cost Base	( 200,000)	( 275,000)
Capital Gain	\$150,000	\$151,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 75,000	\$ 75,500

The adjusted cost base of the shares to Mr. Caswell's son would be their fair market value at the time of transfer.

**Total Increase In Income - Case B** This gives a total increase in Net Income on Mr. Caswell's final return of \$197,500 (\$19,000 + \$28,000 + \$75,000 + \$75,500).

**Case C - Departure From Canada**

With respect to the departure from Canada, ITA 128.1(4)(b) requires a deemed disposition of all property except real property, property used in a Canadian business, and excluded personal property [i.e., a variety of items specified under ITA 128.1(9)]. As both the farm land and rental property are exempt real property, the only deemed dispositions would be the shares of General Industries Ltd. and Caswell Enterprises. The relevant taxable capital gains on these shares were calculated for Case B.

**Total Increase In Income - Case C** This gives a total increase in Mr. Caswell's Net Income of \$150,500 (\$75,000 + \$75,500).

## Solution to Assignment Problem Nine - 9

### Part A

In the absence of an election by Jason not to have ITA 73(1) apply, the disposition will be deemed to have taken place at his tax values. These would be the \$123,000 adjusted cost base of the land and the \$299,772 UCC for the building. Note, however, Geena would retain the original capital cost of \$387,000. Given this information, the transfer would not result in any tax effects for either Jason or Geena Holt.

Based on this, the maximum CCA for 2019 was \$11,991 [(4%)(\\$299,772)]. Note that, because the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Jason, the half year rule does not apply to Geena. This results in a 2019 net rental income of \$11,460 (\$23,451 - \$11,991). All of this would be attributed back to Jason.

When the property is sold on January 1, 2020, the income from the sale of the property would also be attributed to Jason. The relevant amount would be as follows:

	Land	Building
Proceeds Of Disposition	\$175,000	\$475,000
Adjusted Cost Base/Capital Cost	( 123,000)	( 387,000)
Capital Gain	\$ 52,000	\$ 88,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 26,000	\$ 44,000

As maximum CCA was deducted in 2019, the January 1, 2020 UCC balance would be \$287,781 (\$299,772 - \$11,991). Based on this, the disposition results in recapture as follows:

Capital Cost	\$387,000
UCC	( 287,781)
Recapture Of CCA	\$ 99,219

This would result in an increase in Jason Holt's 2020 Net Income For Tax Purposes of \$169,219 (\$26,000 + \$44,000 + \$99,219).

There would be no effect on Geena's Net Income For Tax Purposes in either year.

### Part B

The preceding result would be changed if Geena agrees to purchase the property at its fair market value. Provided Jason elects out of ITA 73(1), there will be no income attribution. Under this approach, the transfer would result in the following amounts of income for Jason.

	Land	Building
Deemed Proceeds Of Disposition	\$167,000	\$426,000
Adjusted Cost Base/Capital Cost	( 123,000)	( 387,000)
Capital Gain	\$ 44,000	\$ 39,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 22,000	\$ 19,500
Capital Cost		\$387,000
UCC		( 299,772)
Recapture Of CCA		\$ 87,228

This would result in an increase in Jason Holt's 2019 Net Income For Tax Purposes of \$128,728 (\$22,000 + \$19,500 + \$87,228).

As this was a non-arm's length transfer, ITA 13(7)(e) would be applicable. While Geena's capital cost for the building will be \$426,000, for CCA and recapture purposes, this value will be limited as follows:

Jason's Capital Cost		\$387,000
Jason's Proceeds Of Disposition	\$426,000	
Jason's Capital Cost	( 387,000)	
Difference	\$ 39,000	
Addition (= Jason's Taxable Capital Gain)	1/2	19,500
Capital Cost For CCA Purposes		\$406,500

Since the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Jason, the half year rule does not apply to Geena.

Based on this, the maximum CCA for 2019 would be \$16,260 [(4%)(406,500)]. This would leave Geena with a 2019 net rental income of \$7,191 (\$23,451 - \$16,260). Since income attribution is not applicable in this case, Geena will include the net rental income in her Net Income For Tax Purposes.

The 2020 sale of the property will result in taxable capital gains, calculated as follows:

	Land	Building
Proceeds Of Disposition	\$175,000	\$475,000
Adjusted Cost Base/Capital Cost	( 167,000)	( 426,000)
Capital Gain	\$ 8,000	\$ 49,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 4,000	\$ 24,500

Based on the CCA that was taken in 2019, the January 1, 2020 UCC would be \$390,240 (\$406,500 - \$16,260). The recapture resulting from the disposition would be equal to the CCA taken by Geena. It would be calculated as follows:

January 1, 2020 UCC	\$390,240
Disposition - Lesser Of:	
Capital Cost For CCA Purposes = \$406,500	
Proceeds Of Disposition = \$475,000	( 406,500)
Negative Ending Balance = Recapture	(\$ 16,260)

**Comparison (Not Required)**

You might wish to note that, while the allocation of the income differs in Part A and Part B, the total amount of income is the same. This is shown in the following tables:

<b>Part A</b>	<b>Total Income</b>	<b>Rent + Recapture</b>	<b>Taxable Capital Gains</b>
Jason For 2019			
Net Rental Income	\$ 11,460	\$ 11,460	
Jason For 2020			
Taxable Capital Gains	70,000		\$70,000
Recapture	99,219	99,219	
<b>Total (No Income For Geena)</b>	<b>\$180,679</b>	<b>\$110,679</b>	<b>\$70,000</b>

<b>Part B</b>	<b>Total Income</b>	<b>Rent + Recapture</b>	<b>Taxable Capital Gains</b>
Jason For 2019			
Taxable Capital Gains	\$ 41,500		\$ 41,500
Recapture	87,228	\$ 87,228	
Geena For 2019			
Net Rental Income	7,191	7,191	
Geena For 2020			
Taxable Capital Gains	28,500		28,500
Recapture	16,260	16,260	
<b>Total</b>	<b>\$180,679</b>	<b>\$110,679</b>	<b>\$70,000</b>

## Solution to Assignment Problem Nine - 10

### ***TD Bank Shares - Gift To Spouse***

Since Ms. Vaughn has not elected out of ITA 73(1), the TD Bank shares could be gifted to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$550,000.

Any dividends on the shares will be attributed back to Ms. Vaughn.

If Jonathan sells the shares for \$800,000 (\$100,000 more than their fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds Of Disposition	\$800,000
Adjusted Cost Base	( 550,000)
Capital Gain	\$250,000
Inclusion Rate	1/2
Taxable Capital Gain	\$125,000

### ***TD Bank Shares - Gift To Children***

In the case of a transfer to either of her children, ITA 69 would require that the gift be treated as a deemed disposition with the proceeds at the fair market value of \$700,000. This would result in a taxable capital gain, as per the following calculation:

Deemed Proceeds Of Disposition	\$700,000
Adjusted Cost Base	( 550,000)
Capital Gain	\$150,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 75,000

The tax base to either of the children would be the fair market value of \$700,000.

If the shares were gifted to Vicky's 15 year old son Biff, any dividends on the shares would be attributed back to her.

There would be no income attribution if the shares were gifted to her 27 year old daughter.

If the shares were sold by either child for \$800,000, there would be no tax consequences for Ms. Vaughn.

However, the selling child would have a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$800,000
Adjusted Cost Base	( 700,000)
Capital Gain	\$100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

### ***Vaughn Enterprises Ltd. - Gift To Spouse***

Since Ms. Vaughn has not elected out of ITA 73(1), the shares in Vaughn Enterprises Ltd. could be gifted to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$475,000.

Any dividends on the shares will be attributed back to Ms. Vaughn.

Should Jonathan subsequently sell these shares for \$1,300,000 (\$100,000 more than their fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds (Fair Market Value)	\$1,300,000
Adjusted Cost Base	( 475,000)
Capital Gain	\$ 825,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 412,500

### ***Vaughn Enterprises Ltd. - Gift To Children***

There is no exemption from the general rules of ITA 69 for transfers of shares in a Canadian controlled private corporation to children. As a consequence, Ms. Vaughn would have a taxable capital gain calculated as follows:

Deemed Proceeds Of Disposition	\$1,200,000
Adjusted Cost Base	( 475,000)
Capital Gain	\$ 725,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 362,500

The adjusted cost base to either of the children would be the fair market value of \$1,200,000.

With respect to the shares gifted to the 15 year old son, any income from the shares would be attributed back to Ms. Vaughn.

There would be no income attribution if the shares were gifted to her 27 year old daughter.

If the shares were subsequently sold by either child for \$1,300,000, there would be no tax consequences for Ms. Vaughn.

However, that child would have a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 1,200,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

### ***Rental Property - Gift To Spouse***

Since Ms. Vaughn has not elected out of ITA 73(1), the rental property could be transferred to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost. The capital cost of the building would remain at \$1,200,000 (\$1,500,000 - \$300,000), the adjusted cost base of the land would remain at \$300,000, and the UCC of the building would be unchanged at \$960,000.

Any income on the property while it is held by her spouse would be attributed back to Ms. Vaughn.

At the time of a subsequent sale of the property by Jonathan Flex for \$2,500,000 (\$100,000 more than the building's fair market value at the time of the gift), the income attribution rules of ITA 74.1(1) would apply. This would result in the following amounts being attributed to Ms. Vaughn at that time:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$400,000	\$2,100,000
Adjusted Cost Base/Capital Cost	( 300,000)	( 1,200,000)
Capital Gain	\$100,000	\$ 900,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 50,000	\$ 450,000
Capital Cost Of Building		\$1,200,000
UCC		( 960,000)
Recapture Of CCA		\$ 240,000

### **Rental Property - Gift To Children**

There is no exemption from the general rules of ITA 69 for transfers of property to children. As a consequence, Ms. Vaughn would be subject to taxation based on a disposition of the property at its fair market value of \$2,000,000 for the building and \$400,000 for the land. This would result in the following amounts of income for Ms. Vaughn at the time of transfer.

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$400,000	\$2,000,000
Adjusted Cost Base/Capital Cost	( 300,000)	( 1,200,000)
Capital Gain	\$100,000	\$ 800,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$ 50,000	\$ 400,000
Capital Cost Of Building		\$1,200,000
UCC		( 960,000)
Recapture Of CCA		\$ 240,000

The cost to either of the children for capital gains purposes would be \$2,000,000 for the building and \$400,000 for the land. For CCA and recapture purposes, the building's value would be limited to \$1,600,000 [ $\$1,200,000 + (1/2)(\$2,000,000 - \$1,200,000)$ ].

If the property was gifted to Vicky's 15 year old son Biff, any rental income on the property would be attributed back to her until Biff reaches 18 years of age.

There would be no income attribution if the property was gifted to her 27 year old daughter.

However, if either child subsequently sold the building for \$2,100,000, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$2,100,000
Adjusted Cost Base	( 2,000,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

This gain would be taxed in the hands of either child.

There would be no taxable capital gain on the sale of the land as its value is unchanged.

While the children would have retained Ms. Vaughn's \$2,000,000 capital cost, the UCC and recapture value would only be \$1,600,000 (see previous calculation). Given this there would be recapture determined as follows:

Capital Cost	\$2,000,000
UCC For CCA And Recapture Purposes	( 1,600,000)
Recapture	\$ 400,000

### **Farm Land - Gift To Spouse**

Since Ms. Vaughn has not elected out of ITA 73(1), the farmland could be transferred to Jonathan with no immediate tax consequences.

The tax cost to Jonathan will be unchanged from her tax cost of \$800,000.

Any income generated by the farm would be considered business income rather than property income. This means that it will not be subject to the income attribution rules and will be taxed in the hands of Jonathan.

In the event of a subsequent sale for \$1,300,000 (\$100,000 more than its fair market value at the time of the gift), the attribution rules of ITA 74.1(1) would apply. This would result in the following taxable capital gain being attributed to Ms. Vaughn at that time:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 800,000)
Capital Gain	\$500,000
Inclusion Rate	1/2
Taxable Capital Gain	\$250,000

### **Farm Land - Gift To Children**

ITA 73(3) permits the transfer of farm property used by the taxpayer or her family to a child on a tax free basis. This means that there would be no tax consequences for Ms. Vaughn at the time of the gift to either child and the adjusted cost base to either child would be her tax cost of \$800,000.

Any income generated by the farm would be considered business income rather than property income. This means that it will not be subject to the income attribution rules and will be taxed in the hands of Ms. Vaughn's children.

If either child subsequently sold the property, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,300,000
Adjusted Cost Base	( 800,000)
Capital Gain	\$ 500,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 250,000

If Biff sells the property, the gain would be attributed back to Ms. Vaughn. Note that, while there is usually no attribution of capital gains from minor children, there is an exception to this when farm property is transferred on a tax free basis.

If Sheila sells the property, the resulting gain would be taxed in her hands and not be attributed back to Ms. Vaughn.

## Solution to Assignment Problem Nine - 11

### Part 1 - Tax Consequences To Valerie At Time Of Gift

The tax consequences associated with gifting each property would be as follows:

**Nixon Distributors Shares** If this property is given to Bunny and Valerie does not elect out of ITA 73(1), there would be no tax consequences at the time of the gift.

If this property is given to either of her children, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,800,000
Adjusted Cost Base	( 823,000)
Capital Gain	\$ 977,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 488,500

**Royal Bank Shares** If this property is given to Bunny and Valerie does not elect out of ITA 73(1), there would be no tax consequences at the time of the gift.

If this property is given to either of her children, there would be a taxable capital gain calculated as follows:

Proceeds Of Disposition	\$1,230,000
Adjusted Cost Base	( 1,050,000)
Capital Gain	\$ 180,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 90,000

**Farm Land** If this property is given to Bunny and Valerie does not elect out of ITA 73(1), there would be no tax consequences at the time of the gift.

In addition, ITA 73(3) permits the transfer of farm property used by the taxpayer or her family to a child on a tax free basis. This means that would be no tax consequences for Valerie at the time of the gift to either child.

**Rental Property** If this property is given to Bunny and Valerie does not elect out of ITA 73(1), there would be no tax consequences at the time of the gift.

If this property is given to either of her children, Valerie would be subject to taxation based on a disposition of the property at its fair market value. This would result in the following amounts of income for Valerie at the time of transfer.

	Land	Building
Proceeds Of Disposition	\$600,000	\$1,300,000
Adjusted Cost Base/Capital Cost	( 400,000)	( 900,000)
Capital Gain	\$200,000	\$ 400,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$100,000	\$ 200,000
Capital Cost Of Building		\$900,000
UCC		( 749,124)
Recapture Of CCA		\$150,876

**Part 2 - Tax Cost Of The Property To The Recipient**

The required tax costs for each property would be as follows:

**Nixon Distributors Shares** As Valerie did not elect out of ITA 73(1), the tax cost of these shares for Bunny would be Valerie's tax cost of \$823,000.

For either child, the tax cost would be the \$1,800,000 fair market value at the time of transfer.

**Royal Bank Shares** As Valerie did not elect out of ITA 73(1), the tax cost of these shares for Bunny would be Valerie's tax cost of \$1,050,000.

For either child, the tax cost would be the \$1,230,000 fair market value at the time of transfer.

**Farm Land** With the use of ITA 73(1) and ITA 73(3), no gain would be recognized if the land was gifted to any of the three possible recipients. Given this, each recipient's tax cost would be equal to Valerie's original cost of \$650,000.

**Rental Property** As Valerie did not elect out of ITA 73(1), the tax costs for Bunny would be Valerie's tax costs. This means \$400,000 for the land and \$900,000 for the building. The building's UCC for Bunny is equal to Valerie's UCC of \$749,124.

For either child, the capital cost of the land would be \$600,000 and the capital cost of the building would be \$1,300,000. However, for CCA purposes, ITA 13(7)(e) would limit the UCC value to \$1,100,000, calculated as follows:

Original Cost Of Building		\$ 900,000
Fair Market Value At Transfer	\$1,300,000	
Original Cost	( 900,000)	
<hr/>		
Excess	\$ 400,000	
Fraction	1/2	200,000
<hr/>		
Value For CCA Purposes		\$1,100,000
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**Part 3 - Income Subsequent To The Gift**

The required information for each property would be as follows:

**Nixon Distributors Shares** If the shares are gifted to Bunny, any dividend income she receives subsequent to the transfer would be attributed back to Valerie.

This would also be the situation if she gives the shares to her 14 year old son, Richard.

However, as her daughter Patricia is over 18, income would not be attributed to her if she is the recipient of the shares.

**Royal Bank Shares** If the shares are gifted to Bunny, any dividend income she receives subsequent to the transfer would be attributed back to Valerie.

This would also be the situation if she gives the shares to her 14 year old son, Richard.

However, as her daughter Patricia is over 18, income would not be attributed to her if she is the recipient of the shares.

**Farm Land** Farm income is considered business income rather than property income. As there is no attribution of business income, any farm income that accrues subsequent to the gift will be taxed in the hands of the recipient.

**Rental Property** If the gift is to either Bunny or Richard, any rental income that accrues subsequent to the gift will be attributed back to Valerie.

If the gift is to her 19 year old daughter Patricia, any rental income that accrues subsequent to the gift would not be attributed back to Valerie, but would be included in Patricia's income.

#### **Part 4 - Tax Consequences Of Subsequent Sale**

The required tax consequences can be described as follows:

**Nixon Distributors Shares** If Bunny is the recipient of the gift, her tax cost would be \$823,000. Based on this, the subsequent sale would have the following tax consequence:

Proceeds Of Distribution (\$1,800,000 + \$100,000)	\$1,900,000
Adjusted Cost Base	( 823,000)
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Capital Gain	\$1,077,000
Inclusion Rate	1/2
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Taxable Capital Gain	\$ 538,500
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This gain would be attributed back to Valerie.

If either child is the recipient of the gift, their tax cost would be \$1,800,000. Based on this, the subsequent sale would have the following tax consequence:

Proceeds Of Distribution (\$1,800,000 + \$100,000)	\$1,900,000
Adjusted Cost Base	( 1,800,000)
<hr/>	
Capital Gain	\$ 100,000
Inclusion Rate	1/2
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Taxable Capital Gain	\$ 50,000
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This gain would be taxed in the hands of the recipient child and would not be attributed back to Valerie.

**Royal Bank Shares** If Bunny is the recipient of the gift, her tax cost would be \$1,050,000. Based on this, the subsequent sale would have the following tax consequence:

Proceeds Of Distribution (\$1,230,000 + \$100,000)	\$1,330,000
Adjusted Cost Base	( 1,050,000)
<hr/>	
Capital Gain	\$ 280,000
Inclusion Rate	1/2
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Taxable Capital Gain	\$ 140,000
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This gain would be attributed back to Valerie.

If either child is the recipient of the gift, their tax cost would be \$1,230,000. Based on this, the subsequent sale would have the following tax consequence:

Proceeds Of Distribution (\$1,230,000 + \$100,000)	\$1,330,000
Adjusted Cost Base	( 1,230,000)
Capital Gain	\$ 100,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 50,000

This gain would be taxed in the hands of the recipient child and would not be attributed back to Valerie.

**Farm Land** The tax cost for each of the 3 potential recipients would be \$650,000. Based on this, the sale of the farm land would result in a taxable capital gain calculated as follows:

Proceeds Of Distribution (\$960,000 + \$100,000)	\$1,060,000
Adjusted Cost Base	( 650,000)
Capital Gain	\$ 410,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 205,000

If the gift was to Valerie's 19 year old daughter Patricia, the gain would be taxed in her hands and not attributed back to Valerie. Alternatively, if the gift was to either Bunny or Richard, the gain would be attributed back to Valerie. While there is usually no attribution of capital gains related to transfers to minors, there is an exception to this when farm property is transferred on a tax free basis.

**Rental Property** If Bunny is the recipient of the gift, her adjusted cost base for the land would be \$400,000 and her capital cost and UCC of the building would be \$900,000 and \$749,124 respectively. Based on this, the sale would have the following tax consequences:

	Land	Building
Proceeds Of Disposition (\$1,300,000 + \$100,000)	\$600,000	\$1,400,000
Adjusted Cost Base/Capital Cost	( 400,000)	( 900,000)
Capital Gain	\$200,000	\$ 500,000
Inclusion Rate	1/2	1/2
Taxable Capital Gain	\$100,000	\$ 250,000
Capital Cost Of Building		\$900,000
UCC		( 749,124)
Recapture Of CCA		\$150,876

Both the taxable capital gain and the recapture would be attributed back to Valerie.

The capital cost for either child for capital gains purposes would be \$600,000 for the land and \$1,300,000 for the building.

Based on this, there would be no taxable capital gain on the sale of the land. However, there would be a taxable capital gain on the building as follows:

Proceeds Of Disposition	\$1,400,000
Capital Cost	( 1,300,000)
<hr/>	
Capital Gain	\$ 100,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain	\$ 50,000
<hr/>	

The taxable capital gain would be taxed in the hands of the gift recipient. It would not be attributed to Valerie.

While the capital cost for determining capital gains is \$1,300,000, for recapture and CCA purposes, the building's value would be limited to \$1,100,000. (See Part 2 of this solution.)

Given this, there would be recapture determined as follows:

UCC	\$1,100,000
Lesser Of:	
Proceeds Of Disposition = \$1,400,000	
Capital Cost = \$1,300,000	( 1,300,000)
<hr/>	
Recapture Of CCA	(\$ 200,000)
<hr/>	

If the gift was to Valerie's 19 year old daughter Patricia, the recapture would be taxed in her hands and not attributed back to Valerie. Alternatively, if the gift was to Richard, the recapture would be attributed back to Valerie.

## Solution to Assignment Problem Nine - 12

### Part A - Suzanne's Federal Tax Payable

#### *Suzanne's Net And Taxable Income*

Suzanne's Net And Taxable Income would be calculated as follows:

Net Business Income (Given)	\$70,544
Net Rental Income (Note 1)	Nil
Capital Gains (Note 1)	Nil
Recapture (Note 1)	Nil
CPP (Note 2)	( 2,749)
Child Care Costs (Note 3)	( 8,500)
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$59,295</b>

**Note 1** In 2018, when Spencer gifted the rental property to Suzanne, he did not elect out of ITA 73(1). This means that Suzanne would have received the property at its tax values. This would be a UCC of \$376,320, a capital cost of \$400,000 for the building, and an adjusted cost base for the land of \$100,000. Based on this, her 2018 deduction for CCA would be \$15,053 [(4%)(376,320)]. Note that, because the acquisition of the building is a non-arm's length transaction, it was used and continues to be used to produce income and was owned for more than one year by Spence, neither the half-year or the Accl provisions are applicable.

Given this, the January 1, 2019 UCC for the building would be \$361,267 (\$376,320 - \$15,053).

The results of the 2019 sale are as follows:

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition	\$120,000	\$435,000
Adjusted Cost Base/Capital Cost	( 100,000)	( 400,000)
Capital Gain	\$ 20,000	\$ 35,000
Inclusion Rate	1/2	1/2
<b>Taxable Capital Gain</b>	<b>\$ 10,000</b>	<b>\$ 17,500</b>
January 1, 2019 UCC		\$361,267
Lesser Of:		
Capital Cost = \$400,000		
Proceeds Of Disposition = \$435,000		( 400,000)
<b>Negative Ending UCC Balance = Recapture</b>		<b>(\$ 38,733)</b>

As no CCA can be taken for 2019 due to the sale, Suzanne's net rental income will be \$54,033 (\$15,300 + \$38,733 in recapture). As Spencer did not elect out of ITA 73(1), income attribution would be applicable and the rental income will be included in his income.

Attribution of all income resulting from the sale will also be included in Spencer's 2019 tax return. This will result in an inclusion of \$81,533 (\$54,033 + \$10,000 + \$17,500).

**Note 2** With business income of \$70,544, Suzanne would pay the Maximum CPP amount of \$5,498. Contributions made on self-employed income are treated as follows:

- One-half of the CPP contributions on self-employed income, to a maximum of \$2,749, are used to generate a 15 percent credit against Tax Payable.

- The other one-half, to a maximum of \$2,749, is deducted under Subdivision e (not in the calculation of business income) in the determination of Net Income For Tax Purposes.

**Note 3** As Suzanne is the lower income spouse, she will generally deduct child care costs. However, during the 6 week period that she attended a designated educational institution, the costs can be deducted by Spencer. The relevant calculations are as follows:

	Spencer	Suzanne
Actual Costs And		
Periodic Cost Limit For Camp Weeks* [(48)(\$250)] + [(4)(2)(\$125)]	\$13,000	\$13,000
Annual Expense Limit [(2)(\$5,000)]	\$10,000	\$10,000
Periodic Expense Limit For Spencer [(6 Weeks)(\$125)(2)]	\$ 1,500	N/A
2/3 Of Earned Income [(2/3)(\$70,544)] [(2/3)(Assume To Exceed \$200,000)]		\$47,029

As the Required indicates that you should assume that Spencer's Taxable Income will exceed \$200,000, Suzanne is clearly the spouse with the lower income.

The lowest figure for Spencer is the \$1,500 Periodic Expense Limit.

For Suzanne the lowest figure is the Annual Expense Limit of \$10,000. This is reduced by the amount claimed by Spencer and she will deduct \$8,500 (\$10,000 - \$1,500). The total for deductible child care costs is less than the actual amount paid. Any amounts paid in the year that are not deductible are lost and cannot be carried forward.

### **Suzanne's Federal Tax Payable**

As Suzanne income is below the medical expense income threshold of \$78,400 (\$2,352 ÷ 3%) while Spencer's income is well above it, and Suzanne has sufficient Tax Payable to utilize the medical expense credit, it is advantageous that she claims it.

Suzanne's Tax Payable would be calculated as follows:

Tax On First \$47,630		\$7,145
Tax On Remaining \$11,665 (\$59,295 - \$47,630) At 20.5 Percent		2,391
Tax Before Credits		\$9,536
Tax Credits		
Basic Personal	(\$12,069)	
CPP On Business Income (Maximum)	( 2,749)	
Tuition - Suzanne	( 2,000)	
Medical Expenses (Note 4)	( 11,121)	
Total	(\$27,939)	
Rate	15%	( 4,191)
Federal Tax Payable - Suzanne		\$ 5,345
CPP Owing (Maximum)		5,498
Federal Amount Owing - Suzanne		\$10,843

**Note 4** It would appear that the brow lift for Suzanne is purely cosmetic in nature. As a consequence, it is not an eligible medical expense. Given this, the base for Suzanne's medical expense credit can be calculated as follows:

Total Eligible Medical Costs (\$21,500 - \$8,600)	\$12,900
Reduced By The Lesser Of:	
• $[(3\%)(\$59,295)] = \$1,779$	
• 2019 Threshold Amount = \$2,352	( 1,779)
<u>Allowable Medical Costs</u>	<u>\$11,121</u>

### **Spencer's Net And Taxable Income**

Spencer's Net and Taxable Income would be calculated as follows:

Attributed From Suzanne (Note 1)	\$ 81,533
Child Care Costs (Note 3)	( 1,500)
Employment Income (Note 5)	115,216
Eligible Dividends Attributed From Twins (Note 6)	2,000
Gross Up On Eligible Dividends $[(38\%)(\$2,000)]$	760
Taxable Capital Gains (Note 7)	4,250
Recapture On Farm Property (Note 8)	37,000
Moving Expenses (Note 9)	( 17,790)
TFSA Contributions (Not Deductible)	Nil
RESP Contributions (Not Deductible)	Nil
<u>Net Income For Tax Purposes And Taxable Income</u>	<u>\$221,469</u>

**Note 5** Spencer's net employment income would be calculated as follows:

Salary	\$106,700
Professional Association Dues	( 1,200)
Registered Pension Plan Contributions	( 4,200)
Bonus (The Amount Received In 2019)	10,000
Automobile Benefit (Note 5A)	1,416
Gift Certificate (A Near Cash Gift)	1,000
Christmas Basket (Under \$500)	Nil
Meals And Entertainment (No Commission Income)	Nil
House Loss Reimbursement (Note 5B)	1,500
<u>Net Employment Income</u>	<u>\$115,216</u>

**Note 5A** Spencer's automobile benefit would be calculated as follows:

Standby Charge	
$[(2/3)(\$523 - \$51)(11)(5,000 \div 18,337)]$	\$ 944
Operating Cost Benefit - Lesser Of:	
$[(1/2)(\$944)] = \$472$	
$[(\$0.28)(5,000)] = \$1,400$	472
<u>Total Automobile Benefit</u>	<u>\$1,416</u>

**Note 5B** Under ITA 6(20), reimbursement for the loss on the sale of a home that results from a move only creates a taxable benefit if the amount is in excess of \$15,000. One-half of any excess over \$15,000 can be received without tax consequences. Given this, Spencer's taxable benefit is \$1,500  $[\$18,000 - \$15,000 - (1/2)(\$18,000 - \$15,000)]$ .

**Note 6** The \$2,000 [(2)(\$1,000)] in eligible dividends received by the twins would be attributed to Spencer. However, there is no attribution of capital gains received by related minors. The \$1,000 [(2)(\$10,000 - \$9,500)] would be taxed in the hands of the twins.

**Note 7** While Spencer only received proceeds of \$5,000 for the shares he sold to his son, ITA 69 would deem the proceeds to be the fair market value of \$36,500. This would result in a taxable capital gain, calculated as follows:

Proceeds Of Disposition	\$36,500
Adjusted Cost Base	( 28,000)
Capital Gain	\$ 8,500
Inclusion Rate	1/2
Taxable Capital Gain	\$ 4,250

**Note 8** The fact that Spencer sold the farm to a non-arm's length party (his brother) will not affect the results as the proceeds of disposition were equal to the fair market value.

As the executors of his father's estate elected to use the \$375,000 fair market value of the land for the transfer to Spencer, there are no tax consequences for him resulting from his sale at this value. However, as the depreciable assets were farm assets so they could be transferred at tax values (UCC), Spencer will include the following amounts of recapture in his 2019 tax return:

Recapture On Building (\$275,000 - \$253,000)	\$22,000
Recapture On Equipment (\$110,000 - \$95,000)	15,000
Total Recapture	\$37,000

**Note 9** Spencer's deductible moving costs would be calculated as follows:

Real Estate Commissions - Old Home	\$11,620
Legal Fees - Old Home	1,250
Loss On Old Home	Nil
Unpaid Property Taxes - Old Home	Nil
Cleaning And Minor Repairs - Old Home	Nil
Legal Fees - New Home	1,460
Cost Of Moving Household Goods	3,460
Total Moving Cost Deduction	\$17,790

As the move took place in July, the income at the "new" work location would be more than adequate to cover this deduction.

**Part B - Spencer's Federal Tax Payable**

Spencer's federal Tax Payable would be calculated as follows:

Tax On First \$210,371		\$48,719
Tax On Next \$11,098 (\$221,469 - \$210,371) At 33 Percent		3,662
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Tax Before Credits		\$52,381
Tax Credits		
Basic Personal Amount	(\$12,069)	
Spousal (Income Too High)	Nil	
EI Premiums	( 860)	
CPP Contributions	( 2,749)	
Canada Employment	( 1,222)	
Transfer Of Charlton's Tuition (Note 10)	Nil	
<hr/>		
Credit Base	(\$16,900)	
Rate	15%	( 2,535)
<hr/>		
Dividend Tax Credit On Eligible Dividends [(6/11)(\$760)]		( 415)
Charitable Donations Including (Note 11)		( 2,736)
<hr/>		
Spencer's Federal Tax Payable		\$46,695
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**Note 10** As explained in Note 7, ITA 69 deemed the proceeds of disposition for Spencer on the sale of shares to Charlton to be the fair market value of \$36,500. However, the adjusted cost base for Charlton is the amount paid for the shares of \$5,000. This would result in a taxable capital gain, calculated as follows:

Proceeds Of Disposition	\$42,000
Adjusted Cost Base	( 5,000)
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Capital Gain	\$37,000
Inclusion Rate	1/2
<hr/>	
Taxable Capital Gain - Charlton	\$18,500
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Charlton's Net Income For Tax Purposes and Taxable Income is equal to his taxable capital gain of \$18,500. Since his income is higher than the basic personal amount of \$12,069 by more than \$5,000, he cannot transfer any of his education related credits to Spencer. The sale of the shares to Charlton for less than fair market value has had an adverse effect on the taxes of Spencer and Charlton.

**Note 11** As Spencer has income that is taxed at 33 percent, the family's charitable donations tax credit will be larger if he claims the donations. The amount would be calculated as follows:

15 Percent Of \$200	\$ 30
33 Percent Of The Lesser Of:	
\$8,400 - \$200 = \$8,200	
\$221,469 - \$210,371 = \$11,098	2,706
29 Percent Of [\$8,400 - (\$8,200 + \$200)]	Nil
<hr/>	
Total Credit	\$2,736
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## Solution to Assignment Problem Nine - 13

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### Part A - Maria's Federal Amount Owing

#### Net Business Income

Net Business Income would be calculated as follows:

Revenues		\$212,000
Assistant's Fees (Note 1)	(\$36,000)	
Research Purchases (Note 2)	( 2,250)	
Promotional Travel Costs (Note 3)	Nil	
Business (100 percent) cell phone	( 600)	
Home Office Costs (Note 4)	( 11,076)	
CCA (Note 5)	( 10,688)	
Office Supplies	( 3,480)	( 64,094)
Net Business Income		<u>\$147,906</u>

**Note 1** Elena's fees are reasonable considering her responsibilities,

**Note 2** The DVD purchases were made for the purpose of producing income from the business. They were not capital assets purchased for rental. There might have been a personal benefit if they were kept and viewed again for enjoyment, but they were not.

**Note 3** Since her publisher reimbursed 100 percent of these expenditures, no part of them is deductible.

**Note 4** The deductible home office costs can be calculated as follows:

Mortgage Interest	\$24,000
Utilities	5,600
Property Taxes	11,500
House Insurance	1,600
House Repair Costs	2,800
House Cleaning	3,100
Total	\$48,600
Floor Space Used	22%
Deductible Portion	\$10,692
Home internet service [(40%(\$960)]	384
Workspace In The Home Costs	<u>\$11,076</u>

**Note 5** The CCA of \$10,688 (\$2,520 + \$8,168) can be calculated as follows:

Class 8 Opening Balance	Nil
Additions	\$ 8,400
Accll Adjustment (50%)(\$8,400)	4,200
CCA Base	\$12,600
Class 8 CCA Rate	20%
Class 8 CCA	<u>\$ 2,520</u>

Class 50 Opening Balance		\$ 150
Additions (\$8,000 + \$1,800)	\$9,800	
Dispositions - Lesser Of:		
• Cost = \$2,700		
• Proceeds Of Disposition = Nil	<u>Nil</u>	9,800
• Accll Adjustment [(50%)(9,800)]		4,900
CCA Base		\$14,850
Class 50 CCA Rate		55%
Class 50 CCA		<u>\$ 8,168</u>

**Property Income**

Maria's only property income would be the dividends on the inherited shares.

Eligible Dividends Received	\$12,600
Gross Up At 38 Percent	<u>4,788</u>
Taxable Dividends	<u>\$17,388</u>

**Taxable Capital Gains**

The shares transferred from Jonathan's account were eligible for rollover treatment because it was a transfer to a spouse. However, that would not be the optimum solution. As Maria was named executor and she sold the stock for less than their fair market value at his death, it is more advantageous to have a taxable capital gain of \$11,500 [(1/2)(\$401,000 - \$378,000)] taxed in Jonathan's hands. This will enable Maria to claim a capital loss on the sale of the shares. Since this is the only 2019 income Jonathan would have, the taxable capital gain is deducted from the spousal credit base on Maria's return.

Her net taxable capital gain would be calculated as follows:

Capital Gain On Cannabis Company's Shares (\$26,600 - \$11,000)	\$ 15,600
Capital Gain On Principal Residence (\$299,900 - \$95,000 - \$67,000 - \$16,250 - \$750)	120,900
Capital Gain Principal Residence Exemption (100%)	( 120,900)
Capital Loss On Inherited Portfolio (\$392,000 - \$401,000)	( 9,000)
Net Capital Gain	\$ 6,600
Inclusion Rate	1/2
Net Taxable Capital Gain	<u>\$ 3,300</u>

**Other Income And Deductions**

Maria's other income and other deductions would be calculated as follows:

Taxable Death Benefit (Note 6)	\$ 5,000
GoFundMe Payment (Note 7)	Nil
Moving Expenses (Note 8)	( 24,506)
Child Care Costs (Note 9)	( 4,400)
CPP [(1/2)(Maximum)]	( 2,749)
Total Other Income And Deductions	<u>(\$26,655)</u>

**Note 6** When death benefits are received, only amounts in excess of an exclusion of \$10,000 are considered to be taxable.

**Note 7** Income Tax Folio S3-F9-C1, "Lottery Winnings, Miscellaneous Receipts ..." states that an amount received as a windfall is not subject to tax. S3-F9-C1 lists eight factors indicating that a particular receipt is a windfall. These include the following:

- the taxpayer had no enforceable claim to the payment,
- the taxpayer made no organized effort to receive the payment,
- the taxpayer neither sought after nor solicited the payment.

Looking at these and the other factors listed, the payment originating from the GoFundMe campaign appears to qualify as a windfall receipt.

It could also be viewed as a gift which is not generally taxable unless it originates from employment.

**Note 8** The deductible amount of moving expenses would be calculated as follows:

Calgary House Hunting Trip	Nil
Medicine Hat Lodging And Food	\$ 1,270
Mileage (812 @ \$0.58 Saskatchewan Rate)	471
Calgary Lodging	1,800
Moving And Storing Household Effects (\$2,340 + \$150 + \$575)	3,065
Real Estate Commission	16,250
Legal Costs Of Selling Old Home	750
Legal Costs Of New Home	900
<b>Total Deductible Amount</b>	<b>\$24,506</b>

The costs of visiting Calgary to find a new home were not deductible. Given her December royalty cheque was \$137,000, there is more than adequate income earned in the new location to make the total amount deductible. There is no restriction on claiming the selling costs to both reduce the capital gain on the old residence and also to increase moving expenses.

**Note 9** As Trish is over 16 years of age, costs directly related to her are not deductible. The child care costs would be \$4,400, the least of the following three amounts:

- Actual Costs And Deductible Camp Costs \$ 4,400
- Annual Limit \$ 5,000
- Income Limit [(2/3)(\$147,906)] \$ 98,604

Actual costs are limited to \$125 per week for Cole during the four week hockey camp. When combined with the other costs, the total is as follows:

Actual Costs Paid	\$3,900
Hockey Camp - 4 Weeks At \$125 Per Week	500
<b>Total</b>	<b>\$4,400</b>

The income limit is based on Net Business Income.

### **Net Income For Tax Purposes And Taxable Income**

Maria's Net Income For Tax Purposes would be calculated as follows:

Net Business Income	\$147,906
Property Income	17,388
Net Taxable Capital Gain	3,300
Other Income And Other Deductions	( 26,655)
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$141,939</b>

Note that the contributions to the TFSAs and RESP do not enter into the calculation of Net Income For Tax Purposes. Such contributions are not deductible.

**Tax Payable**

Maria's federal Tax Payable and CPP Liability would be calculated as follows:

Tax On First \$95,259		\$16,908
Tax On Next \$46,680 (\$141,939 - \$95,259) At 26 Percent		12,137
<hr/>		
Tax Before Credits		\$29,045
Credits:		
Basic Personal Amount	(\$12,069)	
Spouse (\$12,069 - \$11,500 TCG)	( 569)	
Canada Caregiver Amount For Child	( 2,230)	
Transfer Of Son's Disability	( 8,416)	
Disability Supplement (Note 10)	Nil	
CPP Contributions (Maximum)	( 2,749)	
Medical Expenses (Note 11)	( 63,848)	
<hr/>		
Credit Base	(\$89,881)	
Rate	15%	( 13,482)
<hr/>		
Dividend Tax Credit [(6/11)(\$4,788)]		( 2,612)
<hr/>		
Federal Tax Payable		\$12,951
CPP Payable [(2)(\$2,749)]		5,498
<hr/>		
Amount Owing		\$18,449
<hr/>		
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**Note 10** Since Dirk's \$9,300 attendant care costs that are included in the medical expenses total more than \$7,784 (\$4,909 + \$2,875), the disability supplement is reduced to nil.

**Note 11** The medical expenses eligible for the credit are as follows:

Total Medical Costs		\$66,200
Lesser Of:		
• \$4,258 [(3%)(\$141,939)]		
• 2019 Threshold Amount = \$2,352		( 2,352)
<hr/>		
Medical Expense Tax Credit Base		\$63,848
<hr/>		
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**Part B - Tax Effect Of Dividends Received**

Because Betty Lou was alive at year end, the dividends received by the three children under 18 would be attributed back to her and taxed in her hands. That means that Trish, Dirk and Cole would have no increase in Net Income For Tax Purposes as a result of receiving the dividends.

Elena was over 17 and so the dividends would be taxed in her hands. She would have an increase in Net Income For Tax Purposes of \$11,040 [(138%)(1,000)(\$4)(2)].

## CHAPTER TEN SOLUTIONS

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### Solution to Assignment Problem Ten - 1

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#### Case A

The required 2019 PA would be calculated as follows:

Employer's Contribution To RPP	\$3,200
Employer's Contribution To DPSP	1,100
Mr. Brokow's Contribution To RPP	1,500
<hr/>	
PA	\$5,800
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#### Case B

The required 2019 PA would be calculated as follows:

$$[(9)(1.65\%)(\$52,000)] = \$7,722$$

Note that the contributions made during 2019 have no influence on the PA for a defined benefit RPP.

#### Case C

Bob's 2019 PSPA would be calculated as follows:

$$[(9)(1.1\%)(\$48,000)(2 \text{ Years})] = \$9,504$$

The 2019 PA will reflect the benefits earned during 2019. The amount would be \$4,752  $[(9)(1.1\%)(\$48,000)]$ .

#### Case D

Marianne's 2019 PSPA is based on the PAs that would have been reported in the relevant years, less the PAs actually reported. The calculation would be as follows:

$$[(9)(1.7\% - 1.4\%)(\$52,000)(2 \text{ Years})] = \$2,808$$

This \$2,808 PSPA would reflect the increase in benefits that occurred in January, 2019. In addition to this PSPA, there would also be a PA based on her 2019 earnings, multiplied by the benefit factor of 9 and the new formula rate of 1.7 percent. This amount would be \$7,956  $[(9)(1.7\%)(\$52,000)]$ .

## Solution to Assignment Problem Ten - 2

### Part A - Maximum RRSP Deduction

Karla's maximum 2019 RRSP deduction would be calculated as follows:

Unused Deduction Room - January 1, 2017	\$21,300
2017 Addition (Based On 2016 Earned Income Of Nil)	Nil
2018 Addition (Based On 2017 Earned Income Of Nil)	Nil
2019 Addition - Lesser Of:	
RRSP Dollar Limit - \$26,500	
18 Percent Of 2018 Earned Income	
[(18%)(\$19,100)] = \$3,438	3,438
<u>Maximum 2019 RRSP Deduction</u>	<u>\$24,738</u>

### Part B - Penalty For Excess RRSP Contributions

Karla would have been assessed the penalty for excess RRSP contributions for 2018. However, the problem only requires the calculation for 2019.

The 2019 penalty for excess RRSP contributions would be calculated as follows:

Undeducted Contributions		
January 1, 2018 Balance	\$15,250	
2018 Addition	25,000	
2019 Deduction	( 24,738)	\$15,512
Unused Deduction Room		
January 1, 2018	\$21,300	
2019 Addition	3,438	
2019 Deduction	( 24,738)	Nil
Permitted Cushion		( 2,000)
Excess Subject To Penalty		\$13,512
Penalty Rate		1%
Monthly Penalty		\$ 135
Months January To December		12
Penalty For 2019		\$ 1,620

### Part C - Recommended Withdrawal And Advice

Karla's Earned Income for 2019 is \$47,800. This will result in a 2020 addition to her deduction room of \$8,604 [(18%)(\$47,800)]. Provided she wishes to leave the permitted cushion of \$2,000 in her account, she should immediately withdraw \$4,908 (\$13,512 - \$8,604) from her RRSP in order to avoid additional penalties in 2020.

Although she would not be able to deduct the \$2,000 cushion, it would enjoy the benefit of having any income earned while in the plan compounded on a tax free basis. An over contribution to her RRSP would be deductible in a future year with sufficient RRSP deduction room.

As she obviously does not need the funds that need to be withdrawn, some part of them could be contributed to a TFSA, provided she has not already made maximum contributions to this account.

As long as the recommended withdrawal is made prior to the end of 2020 (the year after the assessment for 2018 was made), an offsetting RRSP deduction is available.

In the future, Karla should verify her RRSP deduction room prior to contributing to her RRSP as she should not be paying the penalty for excess RRSP contributions.

## Solution to Assignment Problem Ten - 3

### Part A

Jeff's Net Income For Tax Purposes would be calculated as follows:

Income Under ITA 3(a):		
Net Employment Income	\$59,000	
Interest	2,300	
Eligible Dividends	1,400	
Gross Up [(38%)(\$1,400)]	532	
Royalties	5,000	
Spousal Support Received	12,000	
Child Support Received (Non-Taxable)	Nil	\$ 80,232
<hr/>		
Income Under ITA 3(b):		
Taxable Capital Gains	\$62,000	
Allowable Capital Losses	( 6,000)	56,000
<hr/>		
Balance From ITA 3(a) And (b)		\$136,232
Subdivision e Deductions		
Spousal Support Paid	(\$24,000)	
Child Care Costs	( 5,000)	( 29,000)
<hr/>		
Balance From ITA 3(c)		\$107,232
Deductions Under ITA 3(d):		
Net Rental Loss		( 27,200)
<hr/>		
Net Income For Tax Purposes		\$ 80,032

The capital loss carry forward would affect his Taxable Income only.

### Part B

Jeff's 2018 Earned Income would be calculated as follows:

Net Employment Income	\$59,000
Add Back RPP Contributions	1,500
Royalties (Taxpayer's Own Work)	5,000
Spousal Support Received	12,000
Spousal Support Paid	( 24,000)
Net Rental Loss	( 27,200)
<hr/>	
Earned Income	\$26,300

Given this, his maximum 2019 contribution would be calculated as follows:

Unused Deduction Room - End Of 2018	\$18,000
Annual Addition - Lesser Of:	
• 2019 RRSP Dollar Limit = \$26,500	
• 18% of 2018 Earned Income Of \$26,300 = \$4,734	4,734
Less 2018 PA (\$1,500 + \$1,500 + \$1,000)	( 4,000)
<hr/>	
2019 RRSP Deduction Limit	\$18,734
Allowable Excess Amount	2,000
<hr/>	
Non-Penalty Contribution Limit	\$20,734
Undeducted Contributions From Previous Years	( 20,000)
<hr/>	
Maximum RRSP Contribution	\$ 734

If Jeff contributes this amount of \$734, his deduction will be equal to \$18,734 and he will carry forward undeducted RRSP contributions of \$2,000 (\$20,000 + \$734 - \$18,734).

**Part C**

With the additional \$175,000 of business income, Jeff's earned income would be calculated as follows:

Net Employment Income	\$59,000
Add Back RPP Contributions	1,500
Royalties	5,000
Spousal Support Received	12,000
Spousal Support Paid	( 24,000)
Net Rental Loss	( 27,200)
Net Business Income	175,000
<b>Earned Income</b>	<b>\$201,300</b>

Given this, his maximum 2019 contribution would be calculated as follows:

Unused Deduction Room - End of 2018	\$18,000
Annual Addition - Lesser Of:	
• 2019 RRSP Dollar Limit = \$26,500	
• 18% of 2018 Earned Income Of \$201,300 = \$36,234	26,500
Less 2018 PA (\$1,500 + \$1,500 + \$1,000)	( 4,000)
2019 RRSP Deduction Limit	\$40,500
Allowable Excess Amount	2,000
Non-Penalty Contribution Limit	\$42,500
Undeducted Contributions From Previous Years	( 20,000)
<b>Maximum RRSP Contribution</b>	<b>\$22,500</b>

If Jeff contributes the amount of \$22,500, his deduction will be equal to \$40,500 and he will carry forward undeducted RRSP contributions of \$2,000 (\$20,000 + \$22,500 - \$40,500).

## Solution to Assignment Problem Ten - 4

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### Part A

Hazel's net employment income for 2018 would be \$5,600, her gross salary of \$6,000, reduced by her RPP contributions of \$400.

### Part B

The annual addition for 2019 would be the lesser of \$26,500 and 18 percent of Earned Income for 2018. The latter amount would be calculated as follows:

Net Employment Income (Part A)	\$ 5,600
Add Back RPP Contributions	400
Spousal Support Received [(4)(\$2,500)]	10,000
Net Rental Loss	( 2,600)
<hr/>	
Earned Income	\$13,400
Percent	18%
<hr/>	
Annual Addition (Less than \$26,500)	\$ 2,412
<hr/> <hr/>	

Hazel's maximum deductible RRSP contribution for 2019 would be calculated as follows:

Opening Unused Deduction Room	Nil
Annual Addition	\$2,412
Less 2018 PA (\$400 + \$400)	( 800)
<hr/>	
Maximum Deductible RRSP Contribution	\$1,612
<hr/> <hr/>	

### Part C

As Hazel has made no contributions prior to 2019, she has no undeducted contributions. In addition, she has interest income and dividends that are subject to current Tax Payable. Given this, as well as the fact that her tax free lump-sum payment of \$98,000 and \$62,000 inheritance leaves her with cash in excess of her needs, she should contribute the maximum deductible RRSP contribution of \$1,612 for 2019.

While she could deduct the \$1,612 in 2019, it would be advantageous to defer this deduction until 2020 when she expects to be in a higher tax bracket. At the federal level, the tax savings will be \$419 [(26%)(1,612)] in 2020, as compared to \$242 [(15%)(1,612)] in 2019.

Given her available funds, Hazel should be advised to consider contributing the maximum allowable amount to a Tax Free Savings Account, as well as over contributing up to \$2,000 to her RRSP.

Although she would not be able to deduct these contributions, they would enjoy the benefit of having any income earned while in the plan compounded on a tax free basis. An over contribution to her RRSP would be deductible in a future year with sufficient RRSP deduction room.

All of these contributions should be made as soon as possible in order to maximize the tax free earnings that will accrue inside of her RRSP and/or TFSA.

## Solution to Assignment Problem Ten - 5

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### Part A

Ms. Stratton's net employment income would be calculated as follows:

Gross Salary	\$130,000
Additions:	
Employer's Contributions For Life Insurance	96
Employer's Contribution To Provincial Health Insurance Plan	482
Trip To Bermuda (\$5,000 - \$500 Non-Cash Gift Exemption)	4,500
Deductions:	
RPP Contributions	( 2,390)
Professional Dues	( 225)
<u>Net Employment Income</u>	<u>\$132,463</u>

The reasons for not including the other items given in the problem in the preceding calculation are as follows, identified by the relevant item number in the problem:

Item 1 - Income taxes withheld cannot be deducted in the calculation of Net Income For Tax Purposes or Taxable Income.

Item 1 - The EI and CPP contributions are eligible for tax credit treatment.

Item 1 - Contributions to registered charities create a credit against Tax Payable, but cannot be deducted in the calculation of net employment income.

Item 2 - Employer payments to employee dental plans and private health care plans are not a taxable benefit.

Item 2 - Employer payments to employee group income protection plans are not a taxable benefit.

Item 3 - Employer payments for membership fees in social or recreational clubs are generally not a taxable benefit to the employee, provided the facilities are used primarily for employment related purposes.

Item 5 - Reimbursed costs do not create a taxable benefit for an employee. Consistent with this, the reimbursed costs that have been incurred by an employee cannot be deducted.

Item 7 - Contributions to the RRSP can be deducted under Subdivision e, but not in the calculation of net employment income.

Item 7 - Contributions to a TFSA are not deductible.

### Part B

Ms. Stratton's Earned Income would be calculated as follows:

Net Employment Income	\$132,463
RPP Contributions Deducted	2,390
<u>2019 Earned Income</u>	<u>\$134,853</u>

As the problem states that Ms. Stratton's 2018 Earned Income is equal to her 2019 Earned Income, \$134,853 would also be her 2018 Earned Income. Using this figure, Ms. Stratton's 2019 RRSP Deduction Limit would be calculated as follows:

Unused Deduction Room - End of 2018	Nil
Annual Addition - Lesser Of:	
• 2019 RRSP Dollar Limit = \$26,500	
• [(18%)(\$134,853)] = \$24,274	\$24,274
Less 2018 PA	( 5,560)
<u>2019 RRSP Deduction Limit</u>	<u>\$18,714</u>

As she has made a 2019 contribution of \$20,000, she can deduct her RRSP Deduction Limit of \$18,714. This will leave an undeducted contribution of \$1,286 (\$20,000 - \$18,714).

### **Part C**

The \$20,000 contribution is still a good idea as she has contributed the maximum to her TFSA. Funds invested in an RRSP accumulate earnings on a tax free basis and, unless non-deductible contributions accumulate to more than \$2,000, no penalty is applied. Further, contributions that are not deducted can be carried forward and are available for deduction in any subsequent year with sufficient RRSP deduction room. This means that Ms. Stratton will enjoy the benefits of tax free compounding without experiencing any unfavourable tax consequences.

## Solution to Assignment Problem Ten - 6

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### Part A

Minimum Net Income For Tax Purposes would be calculated as follows:

Accounting Net Income	\$140,823
Additions:	
Accounting Amortization	21,350
Non-Deductible Meals And Entertainment (Note 1)	3,625
Accounting Loss On Asset Sale (\$51,000 - \$35,000)	16,000
Deductions:	
Maximum CCA (Given)	( 29,730)
Terminal Loss (Note 2)	( 8,248)
<u>Net Business Income (For Tax Purposes)</u>	<u>\$143,820</u>
Property Income	
Interest	960
Eligible Dividends	5,650
Gross Up On Eligible Dividends [(38%)(5,650)]	2,147
Royalties	9,340
Net Taxable Capital Gains	
Taxable Capital Gains - Personal Assets [(1/2)(\$29,400)]	14,700
Allowable Capital Losses - Sale Of Shares [(1/2)(\$7,600)]	( 3,800)
Spousal Support Paid	( 18,000)
<u>2019 Net Income Before RRSP Deduction</u>	<u>\$154,817</u>

**Note 1** As only one-half of the \$7,250 in business meals and entertainment that were deducted in determining accounting Net Income can be deducted for tax purposes, \$3,625 [(1/2)(\$7,250)] must be added back to Accounting Net Income to arrive at Net Business Income.

**Note 2** The terminal loss would be calculated as follows:

UCC - January 1, 2019	\$43,248
Reduced By The Lesser Of:	
Capital Cost = \$65,000	
Proceeds Of Disposition = \$35,000	( 35,000)
<u>Positive Ending UCC Balance With No Assets = Terminal Loss</u>	<u>\$ 8,248</u>

### Part B

Given that we are asked to assume the Valerie's 2018 Earned Income is equal to her 2019 Earned Income, we will need to calculate the 2019 figure. The calculations are as follows:

Net Business Income	\$143,820
Royalties (Taxpayer Was Author)	9,340
Spousal Support Paid	( 18,000)
<u>Earned Income For RRSP Purposes</u>	<u>\$135,160</u>

Using this information, the maximum RRSP deduction for 2019 would be calculated as follows:

Unused Deduction Room - January 1, 2019	\$ 8,400
Lesser Of:	
2019 RRSP Limit = \$26,500	
[(18%)(\$135,160)] = \$24,329	24,329
PA	N/A
<u>Maximum RRSP Deduction For 2019</u>	<u>\$32,729</u>

The required amount of additional contributions would be calculated as follows:

Maximum 2019 Deduction	\$32,729
Undeducted Contributions	( 9,300)
<u>Required Additional Contributions</u>	<u>\$23,429</u>

## Solution to Assignment Problem Ten - 7

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### Part A

Minimum Net Income For Tax Purposes would be calculated as follows:

Business Income	
Accounting Net Income	\$183,000
Additions:	
Accounting Amortization	23,000
Recapture (Note 1)	12,000
Meals And Entertainment (Note 2)	7,000
Deductions:	
Maximum CCA (Given)	( 31,000)
Accounting Gain On Asset Sale (\$34,500 - \$24,000)	( 10,500)
<u>Net Business Income</u>	<u>\$183,500</u>
Property Income	
Interest	1,200
Royalties	8,400
Taxable Capital Gains	
Taxable Capital Gain On Depreciable Assets (Note 3)	2,250
Taxable Capital Gain On Personal Assets	18,000
Allowable Capital Loss On Sale Of Shares	( 1,000)
Other Deductions	
Spousal Support Paid	( 3,600)
<u>2019 Net Income Before RRSP Deduction</u>	<u>\$208,750</u>

**Note 1** Recapture of CCA would be calculated as follows:

UCC - January 1, 2019	\$18,000
Reduced By The Lesser Of:	
Capital Cost = \$30,000	
Proceeds Of Disposition = \$34,500	( 30,000)
<u>Negative Ending UCC Balance = Recapture Of CCA</u>	<u>(\$12,000)</u>

**Note 2** As only one-half of the \$14,000 in deducted business meals and entertainment that were deducted in determining accounting Net Income can be deducted for tax purposes, \$7,000  $[(1/2)(\$14,000)]$  must be added back to accounting Net Income to arrive at Net Business Income.

**Note 3** The taxable capital gain would be calculated as follows:

Depreciable Assets - Proceeds Of Disposition	\$34,500
Capital Cost	30,000
<u>Capital Gain On Depreciable Assets</u>	<u>\$ 4,500</u>
Inclusion Rate	1/2
<u>Taxable Capital Gain</u>	<u>\$ 2,250</u>

**Part B**

Given that we are asked to assume the Alicia's 2018 Earned Income is equal to her 2019 Earned Income, we will need to calculate the 2019 figure. The calculations are as follows:

Net Business Income	\$183,500
Royalties (Taxpayer Was Author)	8,400
Spousal Support Paid	( 3,600)
<u>Earned Income For RRSP Purposes</u>	<u>\$188,300</u>

Using this information, the maximum RRSP deduction for 2019 would be calculated as follows:

Unused Deduction Room - January 1, 2019	\$ 6,500
Lesser Of:	
2019 RRSP Limit = \$26,500	
[(18%)(\$188,300)] = \$33,894	26,500
PA	N/A
<u>Maximum RRSP Deduction For 2019</u>	<u>\$33,000</u>

The required amount of additional contributions would be calculated as follows:

Maximum 2019 Deduction	\$33,000
Undeducted Contributions at January 1	( 4,500)
<u>Required Additional Contributions</u>	<u>\$28,500</u>

## Solution to Assignment Problem Ten - 8

### Part A - Rachel's Net And Taxable Income

#### Rachel's Business Income

Rachel's minimum net business income for the year ending December 31, 2019 can be calculated as follows:

<b>Rachel Sorter</b>	
<b>Statement Of Business Income</b>	
<b>For Year Ending December 31, 2019</b>	
Total Revenue	\$411,000
Vehicle Operating Costs $[(\$4,200)(18,000 \div 21,000)]$	\$ 3,600
Building Operating Costs	29,400
Salaries And Wages	53,200
Office Costs	21,800
Business Meals $[(50\%)(\$8,600)]$	4,300
CCA (Note 1)	61,182
<b>Total Expenses</b>	<b>\$173,482</b>
<b>Net Business Income</b>	<b>\$237,518</b>

**Note 1** The total CCA deductible would be as follows:

**Class 1** As the building is used 100 percent for non-residential purposes, it is eligible for the enhanced rate of 6 percent. The maximum CCA would be:

Class 1 CCA $[(\$433,521)(6\%)]$	\$26,011
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**Class 8** The required calculations are as follows:

Opening Balance		\$13,594
Additions	\$67,000	
Disposal - Lesser Of:		
• Proceeds = \$13,000		
• Cost = \$29,500	( 13,000)	54,000
AccII Adjustment $[(50\%)(\$54,000)]$		27,000
CCA Base		\$94,594
Rate		20%
Class 8 CCA		\$18,919

**Class 10.1** As the car cost more than \$30,000, it must be put into a separate Class 10.1. The addition is limited to \$30,000. The deductible CCA is reduced by the personal usage of the car and would be calculated as follows:

Maximum Class 10.1 CCA $[(150\%)(30\%)(\$30,000)]$	\$13,500
Personal Usage $[(3,000/21,000)(\$13,500)]$	( 1,928)
Deductible Class 10.1 CCA	\$11,572

**Class 12** The CCA on the applications software would be calculated as follows:

Class 12 CCA $[(1/2)(100\%)(\$3,600)]$	\$1,800
--	---------

**Class 14.1** The CCA on the client list would be calculated as follows:

Class 14.1 CCA [(150%)(5%)(\\$23,000)]	\$1,725
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**Class 50** The CCA on the laptop computer would be calculated as follows:

Class 50 CCA [(150%)(55%)(\\$1,400)]	\$1,155
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### Summary

Class 1	\$26,011
Class 8	18,919
Class 10.1	11,572
Class 12	1,800
Class 14.1	1,725
Class 50	1,155
<b>Total CCA</b>	<b>\$61,182</b>

### Rachel's Income From Investments

Rachel's income from investments would be calculated as follows:

Taxable Capital Gains [(1/2)(\\$12,750)]	\$ 6,375
Eligible Dividends	11,500
Gross Up On Eligible Dividends [(38%)(\\$11,500)]	4,370
Interest Income	6,300
<b>Total Income From Investments</b>	<b>\$28,545</b>

### Rachel's Net And Taxable Income

As Rachel has no Taxable Income deductions, her Taxable Income is equal to her Net Income For Tax Purposes. Rachel's Net Income For Tax Purposes and Taxable Income would be calculated as follows:

Net Business Income	\$237,518
Income From Investments	28,545
Home Buyers' Plan Inclusion (Note 2)	1,200
RRSP Deduction (Note 3)	( 23,300)
Deductible CPP Contributions [(1/2)(\\$5,498)] (Note 4)	( 2,749)
<b>Net Income For Tax Purposes And Taxable Income</b>	<b>\$241,214</b>

**Note 2** Rachel's 2016 Home Buyers' Plan withdrawal was \$18,000. She should have made a repayment in 2018 of \$1,200 ( $\$18,000 \div 15$ ). As she didn't make the HBP designation for repayment, this \$1,200 was added to her 2018 Net Income For Tax Purposes and deducted from the required Home Buyers' Plan balance. The required payment for 2019 would also be \$1,200 [ $(\$18,000 - \$1,200) \div 14$ ]. As she again failed to make the designation, it will be added to her 2019 Net Income For Tax Purposes.

**Note 3** Rachel's maximum RRSP deduction for 2019 would be calculated as follows:

Unused Deduction Room At January 1 (Given)	\$ 6,500
Addition - Lesser Of:	
2019 RRSP Dollar Limit = \$26,500	
18% Of \$116,000 Earned Income For 2018 = \$20,880	20,880
<b>RRSP Deduction Room</b>	<b>\$27,380</b>

Rachel has available contributions of \$23,300 (\$8,800 + \$14,500). As this is less than the available deduction room, her 2019 deduction will be limited to this amount. This will leave \$4,080 (\$27,380 - \$23,300) in unused deduction room to be used in subsequent years.

**Note 4** Given her business income, Rachel must pay the maximum CPP contributions for self employed contractors. Since CPP contributions are deducted under ITA 60(e) of subdivision e, they will not affect the calculation of business income, which, in turn, means that they will not affect earned income for RRSP purposes.

## Part B - Rachel's Federal Tax Payable

Rachel's federal Tax Payable will be calculated as follows:

Tax On First \$210,371		\$48,719
Tax On Next \$30,843 (\$241,214 - \$210,371) At 33 Percent		10,178
<hr/>		
Tax Before Credits		\$58,897
Tax Credits:		
Basic Personal Amount	(\$12,069)	
CPP (Maximum)	( 2,749)	
Medical Expenses - Claimed By Roland	Nil	
<hr/>		
Credit Base	(\$14,818)	
Rate	15%	( 2,223)
<hr/>		
Dividend Tax Credit [(6/11)(38%)(\$11,500)]		( 2,384)
<hr/>		
Rachel's Federal Tax Payable		\$54,290
CPP Owing (Maximum)		5,498
<hr/>		
Federal Amount Owing - Rachel		\$59,788
<hr/>		

## Part C - Roland's Net And Taxable Income

### *Roland's Employment Income*

Roland's net employment income would be calculated as follows:

Salary		\$66,500
Additions:		
Travel Allowances (Note 5)		
Hotels And Food		Nil
Use Of Personal Automobile		8,400
Deductions:		
Hotels And Food (Note 5)		Nil
Automobile Costs (Note 6)	( 15,235)	
RPP Contributions	( 2,300)	
Union Dues	( 460)	
<hr/>		
Net Employment Income		\$56,905
<hr/>		

**Note 5** Given his actual costs, the allowance for hotels and food seems reasonable. This means it does not have to be included in income. However, this will prevent Roland from deducting his actual costs. With respect to the allowance for personal use of his automobile, it is not based on kilometers driven and this means it cannot be considered "reasonable". It must be included in income.

**Note 6** His deductible automobile costs would be calculated as follows:

Operating Costs	\$ 5,600
CCA On Class 10 [(150%)(30%)(29,500)]	13,275
Total Automobile Costs	\$18,875
Personal Usage [(\$18,875)(5,400 ÷ 28,000)]	( 3,640)
Total Deductible Costs	\$15,235

### **Roland's Net And Taxable Income**

As Roland has no Taxable Income deductions, his Taxable Income is equal to his Net Income For Tax Purposes. Roland's Net Income For Tax Purposes and Taxable Income would be calculated as follows:

Net Employment Income	\$56,905
RRSP Deduction (Note 7)	( 4,500)
Net Income For Tax Purposes And Taxable Income	\$52,405

**Note 7** In the 2 years prior to 2019, Roland's pensionable earnings totaled \$79,000 (\$37,000 + \$42,000). Given this, the Past Service Pension Adjustment (PSPA) resulting from the increased benefit formula would be calculated as follows:

$$[(2.00\% - 1.75\%)(9)(\$79,000)] = \$1,778$$

Using this PSPA, Roland's maximum RRSP deduction for 2019 is calculated as follows:

Unused Deduction Room At January 1 (Given)	\$5,500
Addition - Lesser Of:	
• 2019 RRSP Dollar Limit = \$26,500	
• 18% Of \$48,000 Earned Income For 2018 = \$8,640	8,640
2018 Pension Adjustment (Given)	( 4,100)
2019 Past Service Pension Adjustment	( 1,778)
RRSP Deduction Room	\$8,262

Roland has made RRSP contributions of \$4,500. As this is less than the available deduction room, his 2019 deduction will be limited to this amount.

### **Part D - Roland's Federal Tax Payable**

Roland's federal Tax Payable will be calculated as follows:

Tax On First \$47,630	\$7,145
Tax On Next \$4,775 (\$52,405 - \$47,630) At 20.5 Percent	979
Tax Before Credits	\$8,124
Tax Credits:	
Basic Personal Amount	(\$12,069)
Volunteer Firefighter	( 3,000)
EI Premiums	( 860)
CPP Contributions	( 2,749)
Canada Employment	( 1,222)
Medical Expenses (Note 8)	( 11,538)
Credit Base	(\$31,438)
Rate	15%
	( 4,716)
Roland's Federal Tax Payable	\$3,408

**Note 8** Roland claims the medical expenses as he will have a higher medical expense credit base since his income is lower than Rachel's and 3 percent of his Net Income is less than the income threshold. Although Rachel paid the expenses, as stated in Chapter 4:

"Both ITA 118.2 and Income Tax Folio S1-F1-C1, clearly state that medical expenses can only be deducted by the individual who paid for them. However, in the T1 Guide, this rule is contradicted for couples. According to this Guide, either spouse can claim the medical expense credit, without regard to who actually paid for the expenses."

The \$9,350 cost of the rhinoplasty procedure would be considered cosmetic and cannot be included in the base for the medical expense tax credit. The expenditure for surgery is definitely personal in nature no matter what connection Rachel makes to increased business.

Given this, the base for the medical expense tax credit would be calculated as follows:

Eligible Expenses (\$22,460 - \$9,350)	\$13,110
Reduced By The Lesser Of:	
[(3%)(52,405)] = \$1,572	
2019 Threshold Amount = \$2,352	( 1,572)
<u>Base For Medical Expenses Credit</u>	<u>\$11,538</u>

## Solution to Assignment Problem Ten - 9

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**Note To Instructor** This is a very long and complex Case. If you are considering the use of only part of the question, you should be aware that Part B is required to correctly answer Part C.

### Part A(1) - Zhi Liu

#### **Net Income For Tax Purposes**

Mr. Liu's Net Income For Tax Purposes would be calculated as follows:

Net Employment Income (Note 1)	\$178,000
Interest Income (Note 2)	175
Net Rental Income (Note 3)	Nil
Spousal Support Received	6,000
Unpaid Home Buyer's Plan Repayment	1,500
RRSP Loan Interest - Non-Deductible	Nil
Moving Expenses (Note 4)	( 18,198)
Net Taxable Capital Gains (Note 5)	Nil
<b>Net Income for Tax Purposes</b>	<b>\$167,477</b>

**Note 1** Mr. Liu's Net Employment Income would be calculated as follows:

Salary	\$170,000
Moving Cost Allowance	8,000
<b>Net Employment Income</b>	<b>\$178,000</b>

**Note 2** As the Liu's have a joint bank account, the interest of \$350 can be split evenly as \$175 each.

**Note 3** Mr. Liu's Net Rental Income is calculated as follows:

Rent Revenue	\$26,000
Expenses Other Than CCA	( 22,000)
<b>Income Before CCA</b>	<b>\$ 4,000</b>
Maximum CCA - Lesser Of:	
Rental Income Before CCA = \$4,000	
Maximum CCA [(4%)(\$325,000)] = \$13,000	( 4,000)
<b>Net Rental Income</b>	<b>Nil</b>

There is no reduction in CCA for the short fiscal year when the taxpayer is earning property income. Also, the AccII provisions are not applicable on a non-arm's length transfer of a property that was being used to produce business or property income.

**Note 4** As both Zhi and Meng have income (employment or business) in the new location, either of them can deduct the moving costs, but they cannot both deduct them. Since Zhi is in a higher federal tax bracket than Meng, it is more advantageous for him to do so. In the absence of meal receipts, he will use the prescribed \$51 per day (2018 rate as the 2019 rates do not become available until 2020) for each family member. Zhi's deductible moving costs can be calculated as follows:

Airfare For Moving Family	\$2,000
Meals On Move Day [(3)(\$51)]	153
Costs - Waiting For New Home (15 Days Only)	
Hotels [(\$3,000)(15 ÷ 20)]	2,250
Meals [(3)(\$51)(15)]	2,295
Legal Fees And Commissions - Old Home	3,700
Transportation Of Household Goods	4,900
Legal Fees - New Home	2,900
<b>Total Deductible Moving Costs</b>	<b>\$18,198</b>

As this amount is less than his income at his new job, he will be able to deduct the full amount of these expenses.

He cannot deduct the costs related to finding the new home in London (airfare, meals and hotel costs), hotel and meal costs for 5 of the 20 days while the family was waiting for their new home to be ready, repairs to old home to prepare it for sale, the loss on the old home, or decorations for the new home.

**Note 5** The only capital transaction for Mr. Liu during 2019 involved a sale of Matel Industries shares. The tax consequences of this sale can be calculated as follows:

Acquisition Or Sale Date	Shares Purchased (Sold)	Cost Per Share	Total Cost	Average Cost/Share
May 24, 2011	130	\$26.00	\$ 3,380	
June 30, 2012	170	31.00	5,270	
October 31, 2014	300	29.00	8,700	
Subtotal	600		\$17,350	\$28.92
June 9, 2015	(400)	28.92	( 11,568)	
Superficial Loss (Following Calculation)			5,568	
July 5, 2015	400	12.00	4,800	
June 3, 2018	385	18.00	6,930	
Subtotal	985		\$23,080	\$23.43
January 30, 2019	(250)	23.43	( 5,858)	
December 31, 2019 Balances	735		\$17,222	\$23.43

The purchase on July 5, 2015 is within 30 days of the sale of shares on June 9, 2015. As a result, the June 9 loss would be determined to be superficial, and would be disallowed. The superficial loss is calculated as follows, and is added to the ACB of the remaining shares:

Proceeds of sale, June 9, 2015 [(400)(\$15)]	\$ 6,000
Adjusted Cost Base [(400)(\$28.92)]	( 11,568)
Superficial Loss	(\$ 5,568)

Given the average cost calculated above, the allowable capital loss on the January, 2019 sale of shares would be calculated as follows:

Proceeds [(250)(\$20)]	\$5,000
Cost [(250)(\$23.43)]	( 5,858)
Capital Loss	(\$ 858)
Inclusion Rate	1/2
Allowable Capital Loss	(\$ 429)

As Mr. Liu has no taxable capital gains during 2019, \$429 will be carried forward or back as a Net Capital Loss.

### Part A(2) - Zhi Liu

#### Taxable Income

As Mr. Liu has no deductions from his Net Income For Tax Purposes, his Taxable Income will be equal to his Net Income For Tax Purposes of \$167,477.

### Part A(3) - Zhi Liu

#### Federal Balance Owing

Mr. Liu's federal Balance Owing would be determined as follows:

Tax On First \$147,667		\$30,535
Tax on Next \$19,810 (\$167,477- \$147,667) At 29 Percent		5,745
<hr/>		
Tax Before Credits		\$36,280
Tax Credits:		
Basic Personal	(\$12,069	
CPP (Maximum)	( 2,749)	
EI	( 860)	
Canada Employment	( 1,222)	
<hr/>		
Total Credit Base	(\$16,900)	
Rate	15%	( 2,535)
<hr/>		
Federal Tax Payable		\$33,745
Less: CPP overcontribution (\$2,859 - \$2,749)		( 110)
<hr/>		
Federal Balance Owing		\$33,635
<hr/>		

### Part B(1) - Sheng Liu

#### Net Income for Tax Purposes

Sheng Liu's Net Income For Tax Purposes would be calculated as follows:

Net Employment Income		\$10,000
Property Income = Interest Received		
[(4%)(\$100,000)(6/12)]		2,000
Scholarship Received	\$1,000	
Exempt Portion Of Scholarship (100%)	( 1,000)	Nil
RESP – Accumulated earnings		1,000
RESP – CESG payments		2,500
<hr/>		
Net Income for Tax Purposes		\$15,500
<hr/>		

The \$100,000 payment would not be taxable as it is a gift. The interest on the term deposit would not be attributed to his grandfather as Sheng is over age 18. The funds that Sheng received from his RESP that consisted of the funds originally contributed to the plan by Mr. and Ms. Liu are not taxable.

### Part B(2) - Sheng Liu

#### Taxable Income

As Sheng Liu has no deductions from his Net Income For Tax Purposes, his Taxable Income will be equal to his Net Income For Tax Purposes of \$15,500.

**Part B(3) - Sheng Liu****Tax Payable**

Sheng's Tax Payable would be calculated as follows:

Tax On \$15,500 At 15 Percent		\$2,325
Tax Credits:		
Basic Personal	(\$12,069)	
CPP (Given)	( 332)	
Canada Employment	( 1,222)	
	<hr/>	
Credits Before Tuition	(\$13,623)	
Tuition Credit (\$15,500 - \$13,623)	( 1,877)	
	<hr/>	
Total Credit Base	(\$15,500)	
Rate	15%	( 2,325)
	<hr/>	
Federal Tax Payable		Nil
	<hr/>	

Sheng has a 2019 tuition credit of \$3,000. As Sheng has Net Income For Tax Purposes of \$15,500, he must use \$1,877 (\$15,500 - \$12,069 - \$332 - \$1,222) of this total. This means that the maximum transfer to his mother will be \$1,123 (\$3,000 - \$1,877).

**Part C(1) - Meng Liu****Net Income for Tax Purposes**

The required calculations here would be as follows:

Net Business Income (Note 6)	\$101,375
Net Taxable Capital Gain (Note 7)	9,500
Property Income - Interest [(50%)(350)]	175
RRSP Deduction (2019 deduction limit)	( 8,000)
Deductible CPP Contributions [(1/2)(5,498)]	( 2,749)
	<hr/>
Net Income for Tax Purposes	\$100,301
	<hr/>

**Note 6** Meng Liu's Net Business Income is calculated as follows:

Accounting Income Before Taxes	\$147,000
Accounting Amortization	28,170
Gain On Sale Of Fixed Assets	( 99,290)
Drawings paid to Meng Liu (Not Deductible)	50,000
Landscaping Costs [Deductible Under ITA 20(1)(aa)]	( 12,000)
CCA Classes 1 And 6 (See Calculations)	Nil
Recapture on Building (Class 1)	15,000
Terminal Loss on Fence (Class 6)	( 2,100)
CCA – Class 8 (See Calculations)	( 2,380)
CCA – Class 10 (See Calculations)	( 14,775)
CCA – Class 50 (See Calculations)	( 8,250)
	<hr/>
Net Business Income	\$101,375
	<hr/>

Note that the CPP contributions are deducted under ITA 60(e) of subdivision e. This means that they will not affect the calculation of business income, which, in turn, means that they will not affect earned income for RRSP purposes.

**Class 1 Building and Class 6 Fence**

The required calculations for these classes would be as follows:

	Class 1	Class 6
Opening UCC	\$30,000	\$2,100
Disposition – Lesser of:		
Cost (\$45,000 And \$3,000)		
Proceeds (\$125,000 And Nil)	( 45,000)	Nil
CCA Base	(\$15,000)	\$2,100
Recapture on Building	15,000	
Terminal Loss on Fence		(2,100)
January 1, 2020 UCC (Required For Part D)	Nil	Nil

**Class 8 - Office Furniture And Equipment**

The required calculations for this class would be as follows:

Opening Balance		\$2,000
Additions (\$15,000 + \$2,600)	\$17,600	
Chairs And Table Disposition - Lesser Of:		
• Capital Cost = \$8,000		
• Proceeds Of Disposition = \$6,000	( 6,000)	
Office Equipment Disposition:		
• Capital Cost = \$15,000		
• Proceeds Of Disposition = \$5,000	( 5,000)	6,600
AcclI Adjustment [(50%)(6,600)]		3,300
CCA Base		\$11,900
2019 CCA [(20%)(11,900)]		( 2,380)
AcclI Adjustment Reversal		( 3,300)
January 1, 2020 UCC Balance (Required For Part D)		\$6,220

**Class 10 - Vehicles**

The required calculations for this class would be as follows:

Opening Balance		\$11,000
Additions	\$30,000	
Disposition of Delivery Van - Lesser Of:		
• Capital Cost = \$18,000		
• Proceeds Of Disposition = \$4,500	( 4,500)	25,500
AcclI Adjustment [(50%)(25,500)]		12,750
CCA Base		\$49,250
2019 CCA [(30%)(49,250)]		( 14,775)
AcclI Adjustment Reversal		( 12,750)
January 1, 2020 UCC Balance (Required For Part D)		\$21,725

**Class 50 – Computer Hardware and Systems Software**

The required calculations for this class would be as follows:

Opening Balance	Nil
Additions	\$10,000
Accll Adjustment [(50%)(10,000)]	5,000
CCA Base	\$15,000
2019 CCA [(55%)(15,000)]	( 8,250)
Accll Adjustment Reversal	( 5,000)
January 1, 2020 UCC Balance (Required For Part D)	\$ 1,750

**Note 7 Meng Liu – Taxable Capital Gains**

	<b>Land</b>	<b>Building</b>
Proceeds Of Disposition: Sale Price	\$20,000	\$125,000
Adjusted Cost Base/Capital Cost	( 5,000)	( 45,000)
Capital Gain	\$15,000	\$ 80,000

The total capital gain on the sale of the property is \$95,000. Based on this, the maximum reserve for 2019 would be the lesser of:

- [(\$95,000)(90%)] = \$85,500
- [(\$95,000)(20%)(4 - 0)] = \$76,000

The lesser figure is \$76,000, reflecting the fact that the down payment was less than 20 percent. Given this, the taxable capital gain for 2019 would be calculated as follows:

Total Capital Gain	\$95,000
Reserve	( 76,000)
Capital Gain	\$19,000
Inclusion Rate	1/2
Taxable Capital Gain	\$ 9,500

**Part C(2) - Meng Liu****Taxable Income**

As Meng Liu has no deductions from her Net Income For Tax Purposes, her Taxable Income will be equal to her Net Income For Tax Purposes.

**Part C(3) - Meng Liu****Federal Balance Owing**

Meng Liu's Balance Owing would be determined as follows:

Tax On First \$95,259		\$16,908
Tax on Next \$5,042 (\$100,301 – \$95,259) at 26%		1,311
<hr/>		
Tax Before Credits		\$18,219
Tax Credits:		
Basic Personal	(\$12,069)	
CPP	( 2,749)	
Transfer Of Sheng's Tuition	( 1,123)	
<hr/>		
Total Credit Base	(\$15,941)	
Rate	15%	( 2,391)
<hr/>		
Federal Tax Payable		\$15,828
RRSP overcontribution penalty (Note 8)		40
CPP on self employment income		5,498
<hr/>		
Federal Balance Owing		\$21,366
<hr/>		

**Note 8** Meng's contribution of \$12,000 was \$4,000 greater than her deduction limit for 2019. While a taxpayer is allowed a cumulative overcontribution of \$2,000, the extra \$2,000 (\$4,000 - \$2,000) will attract a penalty under ITA 204.1(2.1) of 1 percent of the excess for each month that it is present. The penalty here is \$40 [(1%)(2 Months)(\$2,000)].

**Part D****Carry Forwards**

The only carry forward was Zhi Liu's \$429 allowable capital loss carry over. The calculations for this are in Part A(1).

**UCC Balances**

The UCC balances related to Meng's business were calculated in Part C(1). They are as follows:

Class 1	Nil
Class 6	Nil
Class 8	\$ 6,220
Class 10	21,725
Class 50	1,750

**Part E - Maximum Deductible RRSP Contributions****Zhi Liu**

Net Employment Income	\$178,000
Net Rental Income	Nil
Taxable Support Payments Received	6,000
<hr/>	
2019 Earned Income	\$184,000
<hr/>	

Given this, his maximum 2020 deductible contribution would be calculated as follows:

2019 RRSP Deduction Limit (Given)	\$ 4,000
Deduction For 2019	Nil
<hr/>	
January 1, 2020 Unused Deduction Room	\$ 4,000
Annual Addition - Lesser Of:	
• 2020 RRSP Dollar Limit = \$27,230	
• 18% of 2019 Earned Income Of \$184,000 = \$33,120	27,230
<hr/>	
2020 RRSP Deduction Limit	\$31,230
<hr/>	

As he has no undeducted contributions from previous years, Zhi Liu's maximum deductible contribution for 2020 is equal to the deduction limit of \$31,230.

Note that if he makes the required Home Buyers' Plan repayment of \$1,500, it will not result in a higher deduction.

### **Meng Liu**

Meng Liu's only Earned Income for RRSP purposes is her \$100,375 of Net Business Income. Given this, her maximum 2020 deductible contribution would be calculated as follows:

2019 RRSP Deduction Limit (Given)	\$ 8,000
Maximum Deduction For 2019 (Contribution = \$12,000)	( 8,000)
<hr/>	
January 1, 2020 Unused Deduction Room	Nil
Annual Addition - Lesser Of:	
• 2020 RRSP Dollar Limit = \$27,230	
• 18% of 2019 Earned Income Of \$100,375 = \$18,068	18,068
<hr/>	
2020 RRSP Deduction Limit	\$18,068
<hr/>	

As Meng Liu has undeducted contributions from 2019 of \$4,000 (\$12,000 - \$8,000), she only needs to contribute \$14,068 (\$18,068 - \$4,000) to be able to deduct her full limit of \$18,068.

### **Liu Family RRSP Recommendations**

Given their income levels, Mr. and Ms. Liu should try to budget to make their maximum RRSP contributions each year and possibly co-ordinate their contributions better. Ms. Liu overcontributed resulting in a penalty while Mr. Liu forgot to make the repayments on his Home Buyers' Plan, which cost him an additional \$435 [(29%)(1,500)] in federal income tax. If the family has sufficient funds, it could be advantageous to repay all of the Home Buyers' Plan to prevent further penalties.

Other than the \$500 in interest paid on the RRSP loan, there is no information on whether the RRSP loan was paid off. Since the interest is not deductible, efforts should be made to pay this loan off. If additional funds are required, the family unit should be able to find an alternative source of financing where the interest is deductible.

Although the information is not provided to calculate an RRSP deduction amount for Sheng, he should have a deduction limit given his past work for his mother's business. RRSP contributions can be made on the basis of this and deducted in any future year. This could be advantageous in that he is likely to be in a higher tax bracket after graduation.

Alternatively, if Sheng does deduct his RRSP contributions while he is still a student, there would be a higher transfer of his tuition tax credit available to his parents.

The Liu's should also try to top up their Tax Free Savings Account balances annually. The interest that was earned on their joint bank account could be earned tax free in a TFSA. In 2019, the Liu's paid federal tax of \$96 [(\$175 x 29%) + (\$175 x 26%)] on their interest income of \$350. Unless the funds were only temporarily in the savings account before being used, it would have been more advantageous to have these funds earn a tax free return in a TFSA. It is also a much better decision to put excess funds in a TFSA rather than to overcontribute to an RRSP as Ms. Liu did in 2019, since the RRSP overcontribution resulted in a penalty.

As long as Sheng has sufficient funds, he should contribute the maximum to both his RRSP and TFSA to reduce his fully taxable interest income. He could also take advantage of the non-penalty \$2,000 over contribution to his RRSP.