

Question 1

Guelph Manufacturing produces metal picture frames. The company's income statements for the last two years are presented below:

	Last Year	This Year
Units Sold	60,000	80,000
Sales	\$850,000	\$1,200,000
Less: Cost of goods sold	<u>600,000</u>	<u>750,000</u>
Gross margin	250,000	450,000
Less: Operating expenses	<u>150,000</u>	<u>180,000</u>
Net income	<u>\$100,000</u>	<u>\$270,000</u>

The company has no beginning or ending inventories.

Required:

- Estimate the company's total variable cost per unit, and its total fixed costs per year. (Remember that this is a manufacturing firm.)
- Compute the company's contribution margin for this year.

Question 2

Below is the most recent contribution format income statement from Michael Scott's Paper Company:

Sales	\$75,000
<i>Less: Variable Expenses</i>	<u>\$45,000</u>
Contribution Margin	\$30,000
<i>Less: Fixed Expenses</i>	<u>\$36,000</u>
Net Loss	<u><u>\$(6,000)</u></u>

The company sells each unit for \$15. There were no beginning or ending inventories.

Required:

- Compute the company's break-even point in units sold.
- Compute the total variable expenses at the break-even point.
- How many units would have to be sold to earn a target profit of \$9,000?
- The sales manager is convinced that a \$6,000 increase in the advertising budget would increase total sales by \$25,000. Would you advise the increased advertising outlay?

Question 3

The Dean Company produces and sells a single product: a laser printer. The following data refer to the year just completed:

Beginning inventory	\$0
Units produced	20,000
Units sold	19,000
Sales price per unit	\$350
Selling and administrative expenses:	
Variable per unit	\$10
Fixed (total)	\$225,000
Manufacturing costs:	
Direct materials cost per unit	\$190
Direct labour cost per unit	\$40
Variable overhead cost per unit	\$25
Fixed overhead (total)	\$250,000

Assume that direct labour is a variable cost.

Required:

- Compute the cost of a single unit of product under both the absorption costing and variable costing approaches.
- Prepare an income statement for the year using absorption costing.
- Prepare an income statement for the year using variable costing.
- Reconcile the absorption costing and variable costing operating income figures in b) and c) above.

Question 4

The following data pertain to Harrier Company's operations during October:

	Oct 1	Oct 31
Raw materials inventory	\$ -	\$ 5,000
Work in process inventory	?	\$ 4,000
Finished goods inventory	\$ 12,000	?

Other data:

Cost of goods manufactured	\$ 105,000
Raw materials used	\$ 40,000
Manufacturing overhead costs	\$ 20,000
Direct labour costs	\$ 39,000
Gross profit	\$ 100,000
Sales	\$ 210,000

1. What was the beginning work in process inventory?
2. What was the ending finished goods inventory?

Question 5

Parker Company uses a job-order costing system and applies manufacturing overhead to jobs using a predetermined overhead rate based on direct labour hours (DLH). Last year, manufacturing overhead and direct labour hours were estimated at \$50,000 and 20,000 hours, respectively, for the year. In June, Job 461 was completed. Materials costs on the job totalled \$4,000, and labour costs totalled \$1,500 at \$5 per hour. At the end of the year, it was determined that the company worked 24,000 direct labour hours for the year and incurred \$54,000 in actual manufacturing overhead costs.

Required:

- a.) Job 461 contained 100 units. Determine the unit cost that would appear on the job cost sheet.
- b.) Determine the under- or overapplied overhead for the year.

Question 6

Ritz Company manufactures two products, Product F and Product G. During the current year, the company expects to produce and sell 1,400 units of Product F and 1,800 units of Product G. The company uses activity-based costing to compute unit product costs for external reports. Data relating to the company's three activity cost pools are given below for the current year:

<u>Activity</u> <u>Cost Pool</u>	Estimated Overhead Costs	<u>Expected Activity</u>		
		<u>Product F</u>	<u>Product G</u>	<u>Total</u>
Machine setups	\$10,800	80	100	180
Purchase orders	\$77,520	510	1,010	1,520
General factory	\$75,920	2,240	3,600	5,840

Required:

Using the activity-based costing approach, determine the overhead cost per unit for each product.

Question 7

Express Parcel, Inc. operates a local delivery service. The company keeps detailed records relating to operating costs of trucks, and has found that if a truck is driven 132,000 kilometres per year, the operating cost is 9 cents per kilometre. This cost increases to 10.5 cents per kilometre if a truck is driven 72,000 kilometres per year.

Required:

Estimate the cost formula for truck operating costs using the high-low method.