

- 1) There are four types of responsibility centres used to evaluate a company's performance. 1) _____
- 2) Responsibility accounting performance reports compare budgets with actual results for each responsibility centre. 2) _____
- 3) Responsibility accounting is a system for evaluating the performance of each responsibility centre and its manager. 3) _____
- 4) A cost centre is a responsibility centre in which a manager is accountable for costs only. 4) _____
- 5) Product lines are generally considered investment centres. 5) _____
- 6) Investments centres are generally large divisions of corporations. 6) _____
- 7) Management by exception directs management's attention to important differences between actual and budgeted amounts. 7) _____
- 8) Investigating significant variances from a budget to assign responsibility is an example of management by exception. 8) _____
- 9) Variances sometimes signal to managers that their strategies are ineffective. 9) _____

10) In a(n) _____ centre, a manager is only accountable for expenses. 10) _____
A) revenue centre B) investment centre
C) profit centre D) cost centre

11) Which of the following is a responsibility centre whose success is measured not only by its income, but also by relating that income to its invested capital? 11) _____
A) Revenue centre B) Cost centre
C) Profit centre D) Investment centre

12) The practice of directing executive attention to important deviations from budgeted amounts is called management by 12) _____
A) objective. B) control. C) analysis. D) exception.

- 13) Which term below best fits "a part, segment, or subunit of a company whose manager is accountable for specified activities"? 13) _____
A) Operating budget B) Responsibility centre
C) Master budget D) Sensitivity analysis
- 14) Which term below best fits "a technique dealing with 'what-if' scenarios"? 14) _____
A) Operating budget B) Sensitivity analysis
C) Responsibility centre D) Master budget
- 15) Zevok Company budgeted \$4 million for customer service costs, but actually spent only \$3 million. Which of the following statements is the best course of action for management to take in this instance? 15) _____
A) Management will investigate this \$1 million unfavourable variance to try to identify and correct the problem.
B) Because this \$1 million variance is favourable, management does not need to investigate further.
C) Management should not investigate every major variance, especially the unfavourable ones.
D) Management will investigate this \$1 million favourable variance to ensure that the cost savings do not reflect skimping on customer service.
- 16) Information technology has made many tasks easier, but not all tasks. Which of the following tasks performed by managers requires more critical thinking skills than the others because it is not as dependent upon information technology? 16) _____
A) Rolling up individual units' budgets into the company wide budget
B) Preparing responsibility centre performance reports that identify variances between actual and budgeted revenues and costs
C) Removing slack from the budget
D) Sensitivity analysis
- 17) Which of the following managers is at the highest level of the organization? 17) _____
A) Profit centre manager B) Cost centre manager
C) Investment centre manager D) Revenue centre manager
- 18) Which description listed below best defines "responsibility accounting"? 18) _____
A) A company's plan for purchases of property, plant and equipment, and other long-term assets
B) A budget that projects cash inflows and outflows and the end of period budgeted balance sheet
C) Details as to how the company expects to go from the beginning cash balance to the desired ending cash balance
D) A system for evaluating the performance of each responsibility centre and its manager
- 19) A manager being evaluated only on year-to-year same store sales would be part of a(n) 19) _____
A) cost centre. B) investment centre.
C) profit centre. D) revenue centre.

- 20) Frito-Lay is a subsidiary of PepsiCo. It qualifies as a(n) 20) _____
 A) cost centre. B) investment centre.
 C) profit centre. D) revenue centre.
- 21) The local McDonald's restaurant which reports revenues and expenses would be a(n) 21) _____
 A) cost centre. B) investment centre.
 C) profit centre. D) revenue centre.
- 22) Dell's payroll department preparing its budget based upon payroll expenses would be a(n) 22) _____
 A) cost centre. B) investment centre.
 C) profit centre. D) revenue centre.
- 23) The fresh food section of a local grocery store reporting operating income for the current year would be a(n) 23) _____
 A) cost centre. B) investment centre.
 C) profit centre. D) revenue centre.
- 24) Free Ride Limo, a division of Travel Escapes, is evaluated based on the ROI of the division. Free Ride Limo would be what type of responsibility centre? 24) _____
 A) Cost centre B) Investment centre
 C) Profit centre D) Revenue centre
- 25) To evaluate the performance of a(n) _____, a top manager is responsible for revenues, costs, and the efficient use of the assets invested in the division. 25) _____
 A) cost centre B) investment centre
 C) profit centre D) revenue centre
- 26) During April, Gordon Company had actual sales of \$160,000 compared to budgeted sales of \$190,000. Actual cost of goods sold was \$105,000, compared to a budget of \$125,500. Monthly operating expenses, budgeted at \$28,000, totaled \$25,000. Interest revenue of \$2,500 was earned during April but had not been included in the budget. The performance report for April would show a net income variance of 26) _____
 A) \$4,000 Favourable. B) (\$4,000) Unfavourable.
 C) (\$10,000) Unfavourable. D) (\$9,000) Unfavourable.
- 27) During July, Johnson Company had actual sales of \$150,000 compared to budgeted sales of \$162,000. Actual cost of goods sold was \$105,500, compared to a budget of \$108,300. Monthly operating expenses, budgeted at \$22,400, totaled \$20,000. Interest revenue of \$2,000 was earned during July but had not been included in the budget. The performance report for July would show a net income variance of 27) _____
 A) (\$4,800) Unfavourable. B) (\$9,600) Unfavourable.
 C) \$9,600 Favourable. D) \$4,800 Favourable.

- 28) Mannock Company budgeted \$400,000 for employee training, but actually spent only \$300,000. Which of the following statements is the best course of action for management to take in this instance? 28) _____
- A) Management will investigate this \$100,000 favourable variance to try to identify and correct the problem with the budgeting system.
 - B) Because this \$100,000 variance is favourable, management does not need to investigate further.
 - C) Management will investigate this \$100,000 favourable variance to ensure that the cost savings do not reflect a reduction in programming.
 - D) Management should hold a meeting with the budget department and the training department to ensure that next year's budget is more realistic.

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 29) InTouch is a Lethbridge company that sells cell phones and PDAs on the web. InTouch has assistant managers for its digital and video cell phone operations. These assistant managers report to the manager of the total cell phone product line, who, with the manager of PDAs, reports to the manager for all sales of hand held devices, Rima Bouagada. Bouagada received the following data for November operations: 29) _____

	CELL PHONES		
	Digital	Video	PDAs
Revenues, budget	\$122,000	500,000	180,000
Expenses, budget	85,000	235,000	135,000
Revenues, actual	130,000	504,000	175,000
Expenses, actual	80,000	240,000	140,000

Required:

Arrange the data in a performance report for November results in thousands of dollars, for digital cell phones, for the total cell phone product line, and for all devices. Should Bouagada investigate the performance of digital cell phone operations? Why or why not?

- 30) Caan Corporation used the following data to evaluate their current operating system. The company sells items for \$20 each and used a budgeted selling price of \$20 per unit. 30) _____

	<u>Actual</u>	<u>Budgeted</u>
Units sold	200,000 units	203,000 units
Variable costs	\$1,250,000	\$1,500,000
Fixed costs	\$ 925,000	\$ 900,000

Required:

Prepare a responsibility report using a income statement in contribution margin format. Use following three column headings: Actual, Budget, Variance. Indicate whether the variance positive or negative.

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 31) Describe the four types of responsibility centres. Give a specific example of each of the four types of responsibility centres.

MATCHING. Choose the item in column 2 that best matches each item in column 1.

Match the following:

- | | | |
|---|-------------------|-----------|
| 32) The maintenance department at OakLawn Zoo | A) Cost Centre | 32) _____ |
| | B) Revenue Centre | |
| 33) The jewellery department at Duggars which is responsible for buying and selling merchandise | C) Profit Centre | 33) _____ |
| 34) The production line at Ford of Canada | | 34) _____ |
| 35) The concession stand at your school's sports facility | | 35) _____ |
| 36) The call centre generating sales of vacations | | 36) _____ |

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- | | |
|--|-----------|
| 37) The master budget of a service company has more individual budget components than does the master budget of a manufacturing company. | 37) _____ |
| 38) The operating budgets of retailers and manufacturers are virtually identical. | 38) _____ |
| 39) Service companies use a "cost of goods sold, inventory, and purchases" budget to calculate the amount of merchandise to purchase. | 39) _____ |
| 40) The same types of financial budgets prepared for manufacturers are also prepared for merchandising and service companies. | 40) _____ |
| 41) Manufacturing, merchandising, and service companies prepare operating expense budgets. | 41) _____ |
| 42) Merchandising companies prepare a direct materials budget. | 42) _____ |
| 43) Service companies prepare a cash budget. | 43) _____ |

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 44) Which of the following type(s) of companies use a "cost of goods sold, inventory, and purchases" budget? 44) _____
 A) Merchandising B) Manufacturing
 C) Service D) Not-for-profit
- 45) The format of the "cost of goods sold, inventory, and purchases" budget is as follows: 45) _____
 A) cost of goods sold - desired ending inventory + beginning inventory.
 B) desired ending inventory - beginning inventory - cost of goods sold.
 C) cost of goods sold + desired ending inventory - beginning inventory.
 D) desired ending inventory + beginning inventory - cost of goods sold.
- 46) Which of the following budgets is not applicable to a service company? 46) _____
 A) Cost of goods sold, inventory and purchases
 B) Sales
 C) Operating expense
 D) Cash
- 47) Which of the following budgets is not applicable to a merchandising company? 47) _____
 A) Sales
 B) Direct materials
 C) Cost of goods sold, inventory and purchases
 D) Operating expense
- 48) Which of the following budgets is not applicable to a merchandising company? 48) _____
 A) Manufacturing overhead B) Budgeted income statement
 C) Cash D) Capital expenditures

Use the information below to answer the following question(s).

Lough Company prepared the following purchases budget:

Month	Budgeted Purchases
June	\$40,000
July	\$43,000
August	\$39,600
September	\$46,000
October	\$49,100

All purchases are paid for as follows: 20% two months after purchase, 55% in the following month, and 25% in the month of purchase.

- 49) What are the cash disbursements in October to account for the September purchases at Lough Company? 49) _____
 A) \$25,300 B) \$9,200 C) \$8,000 D) \$184,000

- 50) What are the total cash disbursements in August to account for the purchase of merchandise at Lough Company? 50) _____
 A) \$9,900 B) \$45,495 C) \$41,550 D) \$33,550
- 51) What are the total cash disbursements in October to account for the purchase of merchandise at Lough Company? 51) _____
 A) \$37,575 B) \$45,495 C) \$12,275 D) \$41,550

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 52) Warm Hands sells its motorcycle gloves worldwide. Warm Hands expects to sell 2,000 pairs of gloves for \$85 each in January and 1,500 pairs of gloves for \$120 each in February. All sales are cash only. Warm Hands expects cost of goods sold to average 65% of sales revenue and the company expects to sell 2,500 pairs of gloves in March for \$125 each. Warm Hands' target ending inventory is \$10,000 plus 50% of the next month's cost of goods sold. 52) _____

Required:

1. Prepare the sales budget for January and February.
2. Prepare Warm Hands' inventory, purchases, and cost of goods sold budget for January and February.

- 53) Warm Hands sells its motorcycle gloves worldwide. Warm Hands expects to sell 2,600 pairs of gloves for \$110 each in January and 2,000 pairs of gloves for \$130 each in February. All sales are cash only. Warm Hands expects cost of goods sold to average 65% of sales revenue and the company expects to sell 3,000 pairs of gloves in March for \$150 each. Warm Hands' target ending inventory is \$10,000 plus 50% of the next month's cost of goods sold. 53) _____

Required:

1. Prepare the sales budget for January and February.
2. Prepare Warm Hands' inventory, purchases, and cost of goods sold budget for January and February.

- 54) Soft Shell purchases motorcycle helmets which it custom paints and sells to motorcycle dealers and repair shops worldwide. Sales are expected to be \$3,000,000 in June, \$5,000,000 in July, \$6,000,000 in August and \$3,000,000 in September. Soft Shell sets its prices to average 35% profit on sales revenue. The company wants to keep a minimum inventory of \$500,000 plus 50% of the next month's cost of goods sold. 54) _____

Required:

Prepare an inventory, purchases, and cost of goods sold budget for the months of July, and August.

- 55) Soft Shell purchases motorcycle helmets which it custom paints and sells to motorcycle dealers and repair shops worldwide. Sales are expected to be \$3,000,000 in June, \$4,000,000 in July, \$4,500,000 in August and \$2,500,000 in September. Soft Shell sets its prices to average 35% profit on sales revenue. The company wants to keep a minimum inventory of \$500,000 plus 20% of the next month's cost of goods sold. 55) _____

Required:

Prepare an inventory, purchases, and cost of goods sold budget for the months of July, and August.

- 56) Soft Shell purchases motorcycle helmets which it custom paints and sells to motorcycle dealers and repair shops worldwide. Sales are expected to be \$3,000,000 in June, \$5,000,000 in July, \$6,000,000 in August and \$3,000,000 in September. Soft Shell sets its prices to average 40% profit on sales revenue. The company wants to keep a minimum inventory of \$500,000 plus 20% of the next month's cost of goods sold. 56) _____

Required:

Prepare an inventory, purchases, and cost of goods sold budget for the months of July, and August.

- 57) Soft Shell purchases motorcycle helmets which it custom paints and sells to motorcycle dealers and repair shops worldwide. Sales are expected to be \$3,000,000 in June, \$4,000,000 in July, \$4,500,000 in August and \$2,500,000 in September. Soft Shell sets its prices to average 40% profit on sales revenue. The company wants to keep a minimum inventory of \$500,000 plus 20% of the next month's cost of goods sold. 57) _____

Required:

Prepare an inventory, purchases, and cost of goods sold budget for the months of July, and August.

- 58) Jacobson's Taxi Service operates a fleet of 60 taxis. They replace 25% of their fleet every year. This year the company president is considering changing over to hybrid vehicles. The model she has in mind costs \$5,000 more than replacing the existing model, but will use 30% less fuel. The price of fuel is expected to remain constant for the upcoming year's budget. 58) _____

The following table presents cost and distance information for the entire fleet:

Current Year Kilometres	Current Year Cost	Budget Year Kilometres
4,500,000	\$495,000	5,000,000

Required:

1. Determine the fuel budget for the upcoming year for both the existing and hybrid models on a per vehicle basis.
2. Prepare a cost/benefit analysis for the hybrid vehicle purchase on a per vehicle basis, assuming fuel costs remain constant over the life of the vehicle.
3. Provide a qualitative factor that would be helpful in making the decision.

- 59) The managerial accountant at the Holly and Ivy Tree Store reported that the company anticipates sales of \$600,000 in September and October, \$625,000 in November, \$635,000 in December, and note that the sales figure is \$640,000 in January. The August sales revenue equal to the September sales revenue. The managerial accountant establishes the prices at Holly and Ivy Tree Store on its merchandise to ensure the company earns 45% gross profit its sales. The managerial accountant expects the ending inventory at the store to equal 12% the next month's cost of goods sold. Compute the COGS, inventory, and purchases budget for October, November, and December. 59) _____

Use the information below to answer the following questions:

RimRim sells tire rims to auto stores and retail customers. Expected sales for the next three months are as follows:

	30-Jun	31-Jul	31-Aug	Quarter Total
Cash Sales	\$ 40,000	\$ 60,000	\$ 74,000	\$ 174,000
Credit Sales	<u>\$ 60,000</u>	<u>\$ 90,000</u>	<u>\$ 111,000</u>	<u>\$ 261,000</u>
Total Sales	<u>\$ 100,000</u>	<u>\$ 150,000</u>	<u>\$ 185,000</u>	<u>\$ 435,000</u>

RimRim generates a gross profit of 35% of sales and has a policy that ending inventory at the end of each quarter should be \$120,000 plus 15% of the cost of goods sold for the next month. Sales are expected to be \$120,000 in September. Inventory at June 1 is \$120,000.

- 60) Calculate the expected Cost of Goods Sold expense for June, July, and August 60) _____
- 61) Calculate the required inventory balance at the end of June, July, and August 61) _____
- 62) Calculate the inventory purchases RimRim will be required to make each month and for the quarter 62) _____

Use the information below for the following questions:

College Logos buys logo-imprinted merchandise and then sells it to university bookstores. Sales are expected to be \$200,000 in September, \$216,000 in October, \$237,000 in November, and \$240,000 in December. College Logos sets its prices to earn an average 40% gross profit on sales revenue. The company does not want inventory to fall below \$40,000 and 15% of the next month's cost of goods sold.

- 63) Calculate the cost of Goods Sold for September, October, and November 63) _____
- 64) Calculate the required inventory balance at the end of September, October, and November 64) _____
- 65) Calculate the inventory purchases College will be required to make each month and for the quarter 65) _____

Answer Key

Testname: UNTITLED1

- 1) TRUE
- 2) TRUE
- 3) TRUE
- 4) TRUE
- 5) FALSE
- 6) TRUE
- 7) TRUE
- 8) TRUE
- 9) TRUE
- 10) D
- 11) D
- 12) D
- 13) B
- 14) B
- 15) D
- 16) C
- 17) C
- 18) D
- 19) D
- 20) B
- 21) C
- 22) A
- 23) C
- 24) B
- 25) B
- 26) B
- 27) A
- 28) C
- 29)

InTouch			
Responsibility Accounting Performance Report (Amounts in thousands)			
November			
	Manager — ALL HANDHELD DEVICES		
	ACTUAL	BUDGET	VARIANCE: FAVORABLE (UNFAVORABLE)
Operating income:			
PDAs	\$35	\$ 45	\$(10)
Cell Phones	\$314	\$302	\$12
Total operating income	<u>\$349</u>	<u>\$347</u>	<u>\$ 2</u>

Answer
Testnam

	ACTUAL	BUDGET	(UNFAVORABLE)
Operating income:			
PDAs	\$35	\$ 45	\$(10)
Cell Phones	\$314	\$302	\$12
Total operating income	<u>\$349</u>	<u>\$347</u>	<u>\$ 2</u>

Assistant Manager — PDAs			
	ACTUAL	BUDGET	VARIANCE: FAVORABLE (UNFAVORABLE)
Revenues and expenses:			
Revenues	\$175	\$180	\$(5)
Expenses	<u>140</u>	<u>135</u>	<u>(5)</u>
Operating income	<u>\$35</u>	<u>\$ 45</u>	<u>\$(10)</u>

Assistant Manager — CELL PHONES			
	ACTUAL	BUDGET	VARIANCE: FAVORABLE (UNFAVORABLE)
Operating income:			
Video Cell Phones	\$ 264	\$ 265	\$(1)
Digital Cell Phones	\$ 50	\$ 37	\$13
Total operating income	<u>\$314</u>	<u>\$302</u>	<u>\$12</u>

Assistant Manager — DIGITAL CELL PHONES			
	ACTUAL	BUDGET	VARIANCE: FAVORABLE (UNFAVORABLE)
Revenues and expenses:			
Revenues	\$130	\$122	\$8
Expenses	<u>80</u>	<u>85</u>	<u> 5</u>
Operating income	<u>\$ 50</u>	<u>\$ 37</u>	<u>\$13</u>

Assistant Manager — VIDEO CELL PHONES			
	ACTUAL	BUDGET	VARIANCE: FAVORABLE (UNFAVORABLE)
Revenues and expenses:			
Revenues	\$504	\$500	\$4
Expenses	<u>240</u>	<u>235</u>	<u>(5)</u>
Operating income	<u>\$ 264</u>	<u>\$ 265</u>	<u>\$(1)</u>

Bouagada should investigate the performance of the digital cell phones operation. Its favourable operating income var significant: 35% (\$13 / \$37) of budget. Bouagada likely would focus her investigation on how digital cell phones achiev higher- than-expected revenue and lower- than-expected costs.

30)

	Actual Results	Static Budget	Static-budget Variance
Units sold	<u>200,000</u>	<u>203,000</u>	
Revenues	\$4,000,000	\$4,060,000	\$60,000 U
Variable costs	<u>1,250,000</u>	<u>1,500,000</u>	<u>250,000</u> F
Contribution margin	\$2,750,000	\$2,560,000	190,000 F
Fixed costs	<u>925,000</u>	<u>900,000</u>	<u>25,000</u> U
Operating income	<u>\$1,825,000</u>	<u>\$1,660,000</u>	<u>\$165,000</u> F

Answer Key

Testname: UNTITLED1

- 31) 1. Cost centre: In a cost centre, managers are accountable for costs only.
2. Revenue centre: In a revenue centre, managers are accountable primarily for revenues. Many times, revenue centre sales territories.
3. Profit centre: In a profit centre, managers are accountable for both revenues and costs and, therefore, profits.
4. Investment centre: In an investment centre, managers are accountable for investments, revenues, and costs. Investment centres are generally large divisions of a corporation.

Student examples will vary.

- 32) A
33) C
34) A
35) C
36) B
37) FALSE
38) FALSE
39) FALSE
40) TRUE
41) TRUE
42) FALSE
43) TRUE
44) A
45) C
46) A
47) B
48) A
49) A
50) C
51) B

Answer Key

Testname: UNTITLED1

52) Requirement 1

Warm Hands
Sales Budget

	January	February	March
Sales price per pair	\$85	\$120	\$125
Number of pairs	2,000	1,500	2,500
Total sales	\$170,000	\$180,000	\$312,500

Requirement 2

Warm Hands
Inventory, Purchases, and Cost of Goods Sold Budget

	January	February
Cost of goods sold (65% of sales budget)	\$110,500	\$117,000
Add: Desired ending inventory (\$10K 50% of next CGS)	68,500	111,563
Total required inventory	\$179,000	\$228,563
Less: Beginning inventory	(65,250)	(68,500)
Purchases	\$113,750	\$160,063

$$50\% \text{ of March CGS} = (0.50 \times [0.65 \times (2,500 \times \$125)]) = \$101,563$$

53) Requirement 1

Warm Hands
Sales Budget

	January	February	March
Sales price per pair	\$110	\$130	\$150
Number of pairs	2,600	2,000	3,000
Total sales	\$286,000	\$260,000	\$450,000

Requirement 2

Warm Hands
Inventory, Purchases, and Cost of Goods Sold Budget

	January	February
Cost of goods sold (65% of sales budget)	\$185,900	\$169,000
Add: Desired ending inventory (\$10K 50% of next CGS)	94,500	156,250
Total required inventory	\$280,400	\$325,250
Less: Beginning inventory	(102,950)	(94,500)
Purchases	\$177,450	\$230,750

$$50\% \text{ of March CGS} = (0.50 \times [0.65 \times (3,000 \times \$150)]) = \$146,250$$

Answer Key

Testname: UNTITLED1

54)

Soft Shell Inventory, Purchases, and Cost of Goods Sold Budget For the Months of August and September

	July	August
Cost of goods sold	\$3,250,000	\$3,900,000
Add: Desired ending inventory	890,000	695,000
Total inventory required	\$4,140,000	\$4,595,000
Less: Beginning inventory	(825,000)	(890,000)
Purchases	\$3,315,000	\$3,705,000

a \$5,000,000 July sales revenue \times 65%

b \$6,000,000 August sales revenue \times 65%

c \$500,000 + (10% \times \$3,900,000 August's CGS)

d \$500,000 + (10% \times \$1,950,000 September's CGS) where September's cost of goods sold is: 65% \times \$3,000,000 = \$1,950,000

e July's beginning inventory is June's ending inventory:

\$500,000 + (10% \times \$3,250,000 July's CGS)

f August's beginning inventory is July's ending inventory

55)

Soft Shell Inventory, Purchases, and Cost of Goods Sold Budget For the Months of August and September

	July	August
Cost of goods sold	\$2,600,000	\$2,925,000
Add: Desired ending inventory	792,500	662,500
Total inventory required	\$3,392,500	\$3,587,500
Less: Beginning inventory	(760,000)	(792,500)
Purchases	\$2,632,500	\$2,795,000

a \$4,000,000 July sales revenue \times 65%

b \$4,500,000 August sales revenue \times 65%

c \$500,000 + (10% \times \$2,925,000 August's CGS)

d \$500,000 + (10% \times \$1,625,000 September's CGS) where September's cost of goods sold is: 65% \times \$2,500,000 = \$1,625,000

e July's beginning inventory is June's ending inventory:

\$500,000 + (10% \times \$2,600,000 July's CGS)

f August's beginning inventory is July's ending inventory

Answer Key

Testname: UNTITLED1

56)

Soft Shell
Inventory, Purchases, and Cost of Goods Sold Budget
For the Months of August and September

	July	August
Cost of goods sold	\$3,000,000	\$3,600,000
Add: Desired ending inventory	1,040,000	770,000
Total inventory required	\$4,040,000	\$4,370,000
Less: Beginning inventory	(950,000)	(1,040,000)
Purchases	\$3,090,000	\$3,330,000

a \$5,000,000 July sales revenue \times 60%

b \$6,000,000 August sales revenue \times 60%

c \$500,000 + (15% \times \$3,600,000 August's CGS)

d \$500,000 + (15% \times \$1,800,000 September's CGS) where September's cost of goods sold is: 60% \times \$3,000,000 = \$1,800,000

e July's beginning inventory is June's ending inventory:

\$500,000 + (15% \times \$3,000,000 July's CGS)

f August's beginning inventory is July's ending inventory

57)

Soft Shell
Inventory, Purchases, and Cost of Goods Sold Budget
For the Months of August and September

	July	August
Cost of goods sold	\$2,400,000	\$2,700,000
Add: Desired ending inventory	905,000	725,000
Total inventory required	\$3,305,000	\$3,425,000
Less: Beginning inventory	(860,000)	(905,000)
Purchases	\$2,445,000	\$2,520,000

a \$4,000,000 July sales revenue \times 60%

b \$4,500,000 August sales revenue \times 60%

c \$500,000 + (15% \times \$2,700,000 August's CGS)

d \$500,000 + (15% \times \$1,500,000 September's CGS) where September's cost of goods sold is: 60% \times \$2,500,000 = \$1,500,000

e July's beginning inventory is June's ending inventory:

\$500,000 + (15% \times \$2,400,000 July's CGS)

f August's beginning inventory is July's ending inventory

Answer Key

Testname: UNTITLED1

58) Requirement 1:

Current model:

Current year cost per kilometre = $\$495,000 / 4,500,000 \text{ km} = \$0.11/\text{km}$

Next year's budget = $\$0.11/\text{km} \times 5,000,000 \text{ km} = \$550,000$

Per vehicle = $\$550,000 / 60 \text{ vehicles} = \$9,166.67$

Hybrid model: $\$9,166.67 \times 70\% = \$6,416.67$

Requirement 2:

Incremental cost	\$ (5,000.00)
Incremental benefit($\$9,166.67 - \$6,416.67$) $\times 4 =$	<u>11,000.00</u>
Net cash saving per vehicle	\$ 6,000.00

Requirement 3:

Anything reasonable such as company image.

59)

Holly and Ivy Store Cost of Goods Sold, Inventory, and Purchases Budget For the months of October, November, and December			
	October	November	December
Sales revenue (from Sales Budget)	\$600,000	\$625,000	\$635,000
Cost of goods sold (55% of sales revenue)	<u>\$330,000</u>	<u>\$343,750</u>	<u>\$349,250</u>
Plus: Desired ending inventory, 12% of next month's cost of goods sold	\$41,250	\$41,910	\$42,240
Total inventory needed	\$371,250	\$385,660	\$391,490
Less: Beginning inventory	\$39,600	\$41,250	\$41,910
Purchases of inventory	\$331,650	\$344,410	\$349,580

60) Cost of Goods Sold = $100\% - 35\% = 65\%$ of Sales

June \$65,000

July \$97,500

August \$120,250

61)

	30-Jun	31-Jul	31-Aug	Three Month Total	30-Sep
Cash Sales	\$ 40,000	\$ 60,000	\$ 74,000	\$ 174,000	
Credit Sales	\$ 60,000	\$ 90,000	\$ 111,000	\$ 261,000	
Total Sales	\$ 100,000	\$ 150,000	\$ 185,000	\$ 435,000	\$ 120,000
CoGS	\$ 65,000	\$ 97,500	\$ 120,250	\$ 282,750	\$ 78,000
Required Inventory Balance	\$ 29,625	\$ 33,038	\$ 26,700	\$ 26,700	

Answer Key

Testname: UNTITLED1

62)	30-Jun	31-Jul	31-Aug	Three Month Total	30-Sep
Total Sales	\$ 100,000	\$ 150,000	\$ 185,000	\$ 435,000	\$ 120,000
CoGS	\$ 65,000	\$ 97,500	\$ 120,250	\$ 282,750	\$ 78,000
Required Inventory Balance	\$ 29,625	<u>\$ 33,038</u>	<u>\$ 26,700</u>	<u>\$ 26,700</u>	
Total Need	\$ 94,625	\$ 130,538	\$ 146,950	\$ 309,450	
Less Beginning Inventory	\$ 31,000	<u>\$ 29,625</u>	<u>\$ 33,038</u>	<u>\$ 31,000</u>	
Required Purchases	\$ 63,625	\$ 100,913	\$ 113,913	\$ 278,450	

63)	Sept	Oct	Nov	Three Month Total
Total Sales	\$ 200,000	\$ 216,000	\$ 237,000	\$ 653,000
CoGS	\$ 120,000	\$ 129,600	\$ 142,200	\$ 391,800
Cost of goods sold = 100 - 40 = 60%				

64)	Sept	Oct	Nov	Three Month Dec Total	
Total Sales	\$ 200,000	\$ 216,000	\$ 237,000	\$ 653,000	\$ 240,000
CoGS	\$ 120,000	\$ 129,600	\$ 142,200	\$ 391,800	\$ 144,000
Required Inventory Balance	\$ 59,440	\$ 61,330	\$ 61,600	\$ 61,600	

65)	Sept	Oct	Nov	Three Month Dec Total	
Total Sales	\$ 200,000	\$ 216,000	\$ 237,000	\$ 653,000	\$ 240,000
CoGS	\$ 120,000	\$ 129,600	\$ 142,200	\$ 391,800	\$ 144,000
Required Inventory Balance	<u>\$ 59,440</u>	<u>\$ 61,330</u>	<u>\$ 61,600</u>	<u>\$ 61,600</u>	
Total Need	\$ 179,440	\$ 190,930	\$ 203,800	\$ 453,400	
Less Beginning Inventory	<u>\$ 31,000</u>	<u>\$ 59,440</u>	<u>\$ 59,440</u>	<u>\$ 31,000</u>	
Required Purchases	\$ 148,440	\$ 131,490	\$ 144,360	\$ 422,400	