



VOTRE LIEN AVEC CE QUI COMPTE — CONNECTS YOU TO WHAT MATTERS

ADM 2341B
MANAGERIAL ACCOUNTING
Fall 2017
Quiz No. 1
Solutions

..... / 20 marks

NAME (PRINT): _____

STUDENT #: _____

Statement of Academic Integrity:

The School of Management does not condone academic fraud, an act by a student that may result in a false academic evaluation of that student or of another student. Without limiting the generality of this definition, academic fraud occurs when a student commits any of the following offences: plagiarism or cheating of any kind, use of books, notes, mathematical tables, dictionaries or other study aid unless an explicit written note to the contrary appears on the exam, to have in his/her possession cameras, radios (radios with head sets), tape recorders, pagers, cell phones, or any other communication device which has not been previously authorized in writing.

Statement to be signed by the student:

I have read the text on academic integrity and I pledge not to have committed or attempted to commit academic fraud in this examination.

Name: _____ (signature)

Note:

A quiz received without the signature of the student will not be graded and will receive a score of zero.

Question No. 1 (8 marks)

Last year, Excalibur Company manufactured 1,000 units of product and identified the following costs associated with its manufacturing facility (variable costs are denoted by “V” and fixed costs by “F”):

Direct materials used (V)	\$35,200
Direct labour (V)	66,500
Annual supervisory salaries (F)	31,100
Indirect materials and supplies (V)	8,000
Utilities to run the manufacturing facility (V)	7,100
Annual insurance on manufacturing facility (F)	9,600
Annual depreciation on plant & equipment (F)	4,800
Property taxes on manufacturing facility (F)	6,500

In addition, the company incurred \$18,000 for period costs representing general administrative expenses. Of this amount, \$7,000 was fixed (F) and the remainder was variable (V).

Required:

The company’s relevant range is between the production of 800 units and 2,000 units. If Excalibur wants to produce 1,400 units next year, using the information above, calculate the cost to manufacture one unit of product.

Answer:

Variable costs to produce 1,400 units:

<i>Direct materials used (\$35,200 x 1.4)</i>	\$ 49,280
<i>Direct labour (\$66,500 x 1.4)</i>	93,100
<i>Indirect materials & supplies (\$8,000 x 1.4)</i>	11,200
<i>Power to run equipment (\$7,100 x 1.4)</i>	<u>9,940</u>
<i>Total</i>	\$ 163,520

Fixed costs to produce 1,400 units:

<i>Supervisory salaries</i>	31,100
<i>Plant utilities (other than power)</i>	9,600
<i>Depreciation on plant & equipment</i>	4,800
<i>Property taxes on building</i>	<u>6,500</u>
<i>Total</i>	\$ 52,000

Total variable and fixed costs to produce 1,400 units **\$ 215,520**

*Therefore: unit manufacturing cost = \$215,200 / 1,400 units = **\$153.94** per unit*

Question No. 2 (4 marks)

Cat Manzi is an operator of a fleet of limousines that takes high rollers to gamble in regional casinos. The “Cat Man” (as his clients call him) wants to estimate the fixed and variable costs per kilometre driven. A recent trade publication indicated that the variable costs should be no more than \$1.25 per kilometre. To check his costs against those indicated in the trade journal, he collected the following data for his limousine fleet for last month.

<u>Limousine Number</u>	<u>Costs</u>	<u>Kilometres</u>
1	\$3,500	12,400
2	\$3,400	11,800
3	\$3,200	10,600
4	\$3,800	11,500
5	\$3,500	11,800
6	\$4,000	13,200
7	\$3,200	9,800
8	\$3,000	9,200
9	\$4,200	11,700
10	\$3,900	12,300

Required:

Use the high low method and calculate the estimated total cost to the Cat Man of driving two limousines 10,000 kilometres each.

Answer:

$$\beta = \frac{\$4,000 - \$3,000}{13,200 - 9,200} = \$0.25 \text{ per kilometre}$$

$$\begin{aligned} \text{Fixed Costs:} &= \$4,000 - (\$0.25)(13,200) \\ &= \$4,000 - \$3,300 \\ &= \$700 \end{aligned}$$

$$\begin{aligned} \text{Therefore:} \quad Y &= \$700 + 0.25 X \\ &= \$700 + \$0.25(10,000) = \$3,200 \end{aligned}$$

$$\begin{aligned} \text{So:} \quad 2Y &= \$3,200 \times 2 \\ &= \underline{\underline{\$6,400}} \end{aligned}$$

Question No. 3 (2 marks)

Does a management accountant occupy a line position or a staff position within an organization? Explain your reasoning.

Answer:

A management accountant occupies a staff position within an organization. Incumbents of staff positions provide and service and assistance to those who occupy line positions. The management accountant prepares accounting information that line managers use in order to make day-to-day and long-term decisions to help achieve the basic objectives of the organization.

Question No. 4 (3 marks)

What are the six business functions that comprise the value chain?

Answer:

- 1: *Research & Development*
- 2: *Design*
- 3: *Production*
- 4: *Marketing*
- 5: *Distribution*
- 6: *Customer Service*

Question No. 5 (3 marks)

Hooter Manufacturing Company reported the following year-end information:

Beginning work in process inventory	\$23,000
Beginning finished goods inventory	35,000
Ending work in process inventory	25,000
Ending raw materials inventory	10,000
Beginning raw materials inventory	12,000
Ending finished goods inventory	30,000
Raw materials purchased	340,000
Direct labour	120,000
Indirect materials	8,000
Other manufacturing overhead	45,000

Required:

Calculate Hooter's cost of goods manufactured for the year.

Answer: $DM\ Used + DL + MOH + Beg\ WIP - End\ WIP$
 $(\$12,000 + \$340,000 - \$10,000) + \$120,000 + (\$8,000 + \$45,000) + \$23,000 -$
 $\$25,000 = \underline{\underline{\$513,000}}$