Acct 2

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Ch. 2 Practice Quiz

1. Abair Company's manufacturing overhead is 20% of its total conversion costs. If direct labor is $38,000 and if direct materials are $35,000, the manufacturing overhead is:

   A) $18,250
   B) $9,500
   C) $8,750
   D) $152,000

   Answer: B Level: Hard LO: 1

Conv = DL + MoH

Conv = DL + 20%(Conv)

80%(Conv) = DL = $38,000

CONV. = $47,500

80%	20%
$38,000	$9500
DL	Mold

2. A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is $3,000 and is paid at the beginning of the first year. Three-fourths of the premium applies to factory operations and one-fourth applies to selling and administrative activities. What amounts should be considered product and period costs respectively for the first year of coverage?

	Product	Period
A)	$1,000	$0
B)	$250	$750
C)	$2,250	$750
D)	$750	$250

Answer: D Level: Hard LO: 2

$3,000 ÷ 3 yrs = $1,000/yr.

3/4 Product → $750

1/4 Period → 250

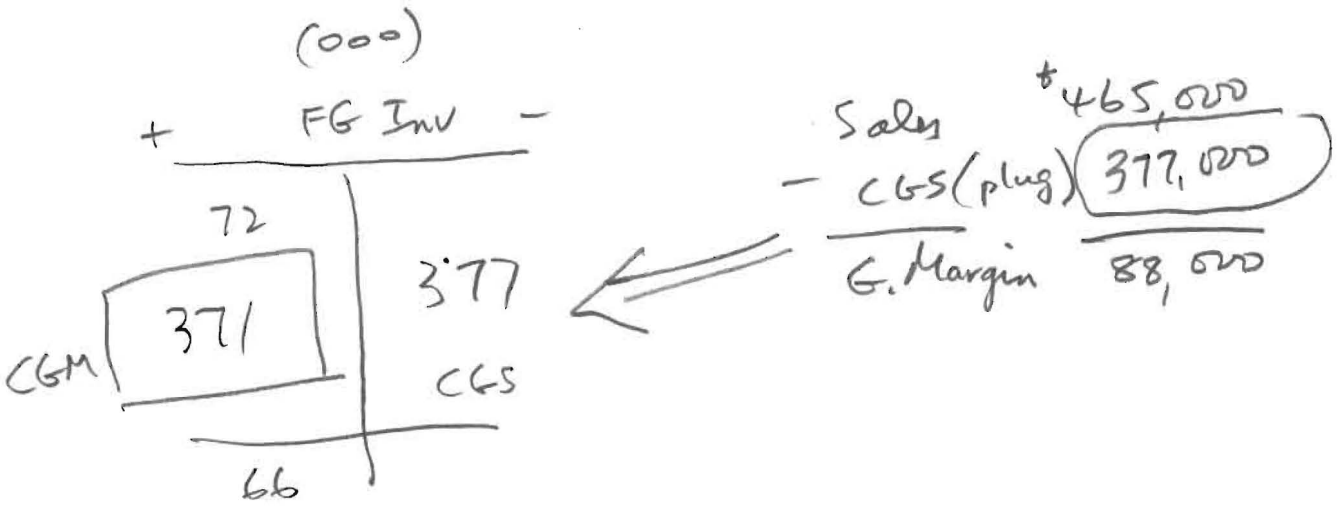
3. Last month a manufacturing company had the following operating results:

Beginning finished goods inventory	$72,000
Ending finished goods inventory	$66,000
Sales	$465,000
Gross margin	$88,000

What was the cost of goods manufactured for the month?

A) $371,000
B) $459,000
C) $383,000
D) $377,000

Answer: A Level: Hard LO: 3,4



Clyde Company has provided the following data for the month of November:

Inventories	*November 1*	*November 30*
Raw materials	$17,000	?
Work in process	$14,000	$12,000
Finished goods	?	$9,000

Additional Data:	
Sales revenue	$102,000
Direct labor costs	$10,000
Manufacturing overhead costs	$12,000
Selling expenses	$14,000
Administrative expenses	$16,000
Cost of goods manufactured	$40,000
Raw materials purchases	$10,000

(000)

+ RM Inv. −

BB 17	
10 purch	16 used
EB 11	

#4

4. The ending raw materials inventory was:
   A) $11,000
   B) $23,000
   C) $10,000
   D) $12,000
   Answer: A Level: Hard LO: 2,4

5. If the net operating income was $40,000, then the beginning finished goods inventory was:
   A) $22,000
   B) $9,000
   C) $42,000
   D) $1,000
   Answer: D Level: Hard LO: 2,3,4

DL

10

(000)

Sales	102
− CGS	32
GM	70
− S+A	(14+16)
NI	40

MoH

12

WIP Inv.

14	
38	40 CGM
12	

FG Inv

BB 1	
CGM 40	32 CGS
9	

At a sales volume of 30,000 units, Carne Company's total fixed costs are $30,000 and total variable costs are $45,000. The relevant range is 20,000 to 40,000 units.

6. If Carne Company were to sell 32,000 units, the total expected cost would be:
   A) $75,000
   B) $78,000
   C) $80,000
   D) $77,000
   Answer: B Level: Easy LO: 5

Units →	30,000	1	32,000
S			
VC	45,000	1.5	48,000 → 78,000
CM			
FC	30,000		30,000
NI			

7. Bill Pope has developed a new device that is so exciting he is considering quitting his job in order to produce and market it on a large-scale basis. Bill will rent a garage for $300 per month for production purposes. Utilities will cost $40 per month. Bill has already taken an industrial design course at the local community college to help prepare for this venture. The course cost $300. Bill will rent production equipment at a monthly cost of $800. He estimates the material cost per unit will be $5, and the labor cost will be $3. He will hire workers and spend his time promoting the product. To do this he will quit his job which pays $3,000 per month. Advertising and promotion will cost $900 per month.

Required:

Complete the chart below by placing an "X" under each heading that helps to identify the cost involved. There can be "Xs" placed under more than one heading for a single cost, e.g., a cost might be a sunk cost, an overhead cost and a product cost; there would be an "X" placed under each of these headings opposite the cost.

	Opportunity Cost	Sunk Cost	Variable Cost	Fixed Cost	Manufacturing Overhead Cost	Product Cost	Selling Cost	Differential Cost*
Garage rent				X	X	X		X
Utilities				X	X	X		X
Cost of the industrial design course		X						
Equipment rented				X	X	X		X
Material cost			X			X		X
Labor cost			X			X		X
Present salary	X							X
Advertising				X			X	X

* Between the alternatives of going into business to make the device or not going into business to make the device.

8. Lettman Corporation has provided the following partial listing of costs incurred during November:

Marketing salaries	$45,000	Per
Property taxes, factory	$9,000	Prod
Administrative travel	$98,000	Per
Sales commissions	$48,000	Per
Indirect labor	$38,000	Prod
Direct materials	$165,000	Prod
Advertising	$138,000	Per
Depreciation of production equipment	$39,000	Prod
Direct labor	$87,000	Prod
	329,000	$338,000

Required:

a. What is the total amount of product cost listed above? Show your work.
b. What is the total amount of period cost listed above? Show your work.

9. Corio Corporation reports that at an activity level of 3,800 units, its total variable cost is $221,464 and its total fixed cost is $94,848.

Required:

For the activity level of 3,900 units, compute: (a) the total variable cost; (b) the total fixed cost; (c) the total cost; (d) the average variable cost per unit; (e) the average fixed cost per unit; and (f) the average total cost per unit. Assume that this activity level is within the relevant range.

VC = 221,464 ÷ 3800 units = $58.28 per unit

Activity Level 3900

Total Cost =

VC (a) 3900 units × $58.28 per unit = $227,292

FC (b) $94,848

Total (c) $322,140

Cost per unit =

VC (d) $58.28

FC (e) [$94,848 ÷ 3900 units] = 24.32

Total (f) $82.60

10. Slonaker Inc. has provided the following data concerning its maintenance costs:

	X Machine-Hours	Y Maintenance Cost
April	~~5,799~~	~~$30,379~~
May	~~5,782~~	~~$30,289~~
June	~~5,764~~	~~$30,237~~
July	~~5,761~~	~~$30,233~~
August (Low)	5,717	$30,078
September	~~5,795~~	~~$30,360~~
October (High)	5,809	$30,388
November	~~5,801~~	~~$30,378~~
December	~~5,785~~	~~$30,318~~

$Y = a + bX$

Management believes that maintenance cost is a mixed cost that depends on machine-hours.

Required:

Estimate the variable cost per machine-hour and the fixed cost per month using the high-low method. Show your work!

$$b = \text{slope} = \frac{\Delta Y}{\Delta X} = \frac{\$30,388 - \$30,078}{5809 \text{ MH} - 5717 \text{ MH}} = \frac{\$310}{92 \text{ MH}} = 3.37 \text{ per MH}$$

$$Y = a + \$3.37 \text{ per MH} (X)$$

$$\text{August: } \$30,078 = a + \$3.37 \text{ per MH} (5717 \text{ MH})$$

$$FC = a = \$10,812$$

$$\boxed{Y = \$10,812 + \$3.37 \text{ per MH} (X)}$$

11. Whitman Corporation, a merchandising company, reported sales of 7,400 units for May at a selling price of $677 per unit. The cost of goods sold (all variable) was $441 per unit and the variable selling expense was $54 per unit. The total fixed selling expense was $155,600. The variable administrative expense was $24 per unit and the total fixed administrative expense was $370,400.

Required:

a. Prepare a contribution format income statement for May.
b. Prepare a traditional format income statement for May.

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Required:

a. Prepare a contribution format income statement for May.
b. Prepare a traditional format income statement for May.

a. Contribution Format Income Statement

Sales (7,400 units × $677 per unit)		$5,009,800
Variable expenses:		
Cost of goods sold (7,400 units × $441 per unit)	$3,263,400	
Variable selling expense (7,400 units × $54 per unit)	399,600	
Variable administrative expense (7,400 units × $24 per unit)	177,600	3,840,600
Contribution margin		1,169,200
Fixed expenses:		
Fixed selling expense	155,600	
Fixed administrative expense	370,400	526,000
Net operating income		$643,200

b. Traditional Format Income Statement

Sales (7,400 units × $677 per unit)		$5,009,800
Cost of goods sold (7,400 units × $441 per unit)		3,263,400
Gross margin		1,746,400
Selling and administrative expenses:		
Selling expense ((7,400 units × $54 per unit) + $155,600)	$555,200	
Administrative expense ((7,400 units × $24 per unit) + $370,400)	548,000	1,103,200
Net operating income		$643,200

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 02-05 Prepare income statements for a merchandising company using the traditional and contribution formats
Level: Medium