

Cost Concepts: Practice Quiz Questions

TB Problem Qu. 1-273 (Static) A number of costs are listed below.

Cost Description	Cost Object
1. Wages of carpenters on a home building site	A particular home
2. Cost of wiring used in making a personal computer	A particular personal computer
3. Manager's salary at a hotel run by a chain of hotels	A particular hotel guest
4. Manager's salary at a hotel run by a chain of hotels	The particular hotel
5. Cost of aluminum mast installed in a yacht at a yacht manufacturer	A particular yacht
6. Monthly lease cost of X-ray equipment at a hospital	The Radiology (X-Ray) Department
7. Cost of screws used to secure wood trim in a yacht at a yacht manufacturer	A particular yacht
8. Cost of electronic navigation system installed in a yacht at a yacht manufacturer	A particular yacht
9. Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer	The auto repair shop
10. Cost of a measles vaccine administered at an outpatient clinic at a hospital	A particular patient

Required:

For each item above, indicate whether the cost is direct or indirect with respect to the cost object listed next to it.

Solution to TB Problem Qu. 1-273

1. Wages of carpenters on a home building site; A particular home; Direct
2. Cost of wiring used in making a personal computer; A particular personal computer; Indirect
3. Manager's salary at a hotel run by a chain of hotels; A particular hotel guest; Indirect
4. Manager's salary at a hotel run by a chain of hotels; The particular hotel; Direct
5. Cost of aluminum mast installed in a yacht at a yacht manufacturer; A particular yacht; Direct
6. Monthly lease cost of X-ray equipment at a hospital; The Radiology (X-Ray) Department; Direct
7. Cost of screws used to secure wood trim in a yacht at a yacht manufacturer; A particular yacht; Indirect
8. Cost of electronic navigation system installed in a yacht at a yacht manufacturer; A particular yacht; Direct
9. Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer; The auto repair shop; Direct
10. Cost of a measles vaccine administered at an outpatient clinic at a hospital; A particular patient; Direct

References

Essay

Difficulty: 1 Easy

TB Problem Qu. 1-273 (Static) A number of costs are listed...

Learning Objective: 01-01 Understand cost classifications used for assigning costs to cost objects: direct costs and indirect costs.

TB Problem Qu. 1-275 (Algo) Saxbury Corporation's relevant range of activity...

Saxbury Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,200 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 5.10
Direct labor	\$ 3.45
Variable manufacturing overhead	\$ 1.40
Fixed manufacturing overhead	\$ 3.50
Fixed selling expense	\$ 0.60
Fixed administrative expense	\$ 0.45
Sales commissions	\$ 0.35
Variable administrative expense	\$ 0.35

Required:

a. For financial reporting purposes, what is the total amount of product costs incurred to make 5,200 units?

b. For financial reporting purposes, what is the total amount of period costs incurred to sell 5,200 units?

c. If 6,200 units are sold, what is the variable cost per unit sold? (Round "Per unit" answer to 2 decimal places.)

	Average Cost per Unit
Direct materials	\$ 5.10
Direct labor	\$ 3.45
Variable manufacturing overhead	\$ 1.40
Fixed manufacturing overhead	\$ 3.50
Fixed selling expense	\$ 0.60
Fixed administrative expense	\$ 0.45
Sales commissions	\$ 0.35
Variable administrative expense	\$ 0.35

d. If 6,200 units are sold, what is the total amount of variable costs related to the units sold?

e. If 6,200 units are produced, what is the average fixed manufacturing cost per unit produced? (Round "Per unit" answer to 2 decimal places.)

f. If 6,200 units are produced, what is the total amount of fixed manufacturing cost incurred?

	Average Cost per Unit
Direct materials	\$ 5.10
Direct labor	\$ 3.45
Variable manufacturing overhead	\$ 1.40
Fixed manufacturing overhead	\$ 3.50
Fixed selling expense	\$ 0.60
Fixed administrative expense	\$ 0.45
Sales commissions	\$ 0.35
Variable administrative expense	\$ 0.35

g. If 6,200 units are produced, what is the total amount of manufacturing overhead cost incurred? What is this total amount expressed on a per unit basis? (Round "Per unit" answer to 2 decimal places.)

h. If the selling price is \$22.60 per unit, what is the contribution margin per unit sold? (Round "Per unit" answer to 2 decimal places.)

i. If 4,200 units are produced, what is the total amount of direct manufacturing cost incurred?

	Average Cost per Unit
Direct materials	\$ 5.10
Direct labor	\$ 3.45
Variable manufacturing overhead	\$ 1.40
Fixed manufacturing overhead	\$ 3.50
Fixed selling expense	\$ 0.60
Fixed administrative expense	\$ 0.45
Sales commissions	\$ 0.35
Variable administrative expense	\$ 0.35

j. If 4,200 units are produced, what is the total amount of indirect manufacturing cost incurred?

k. What incremental manufacturing cost will the company incur if it increases production from 5,200 to 5,201 units? (Round "Per unit" answer to 2 decimal places.)

Solution to TB Problem Qu. 1-275 (Algo) Saxbury Corporation's relevant range of activity...

a.

Direct materials	\$ 5.10
Direct labor	3.45
Variable manufacturing overhead	1.40
Variable manufacturing cost per unit	<u>\$ 9.95</u>
Total variable manufacturing cost (\$9.95 per unit × 5,200 units produced)	\$ 51,740
Total fixed manufacturing overhead cost (\$3.50 per unit × 5,200 units produced)	18,200
Total product (manufacturing) cost	<u>\$ 69,940</u>

b.

Sales commissions	\$ 0.35
Variable administrative expense	0.35
Variable selling and administrative expense per unit	<u>\$ 0.70</u>
Total variable selling and administrative expense (\$0.70 per unit × 5,200 units sold)	\$ 3,640
Total fixed selling and administrative expense (\$0.60 per unit × 5,200 units + \$0.45 per unit × 5,200 units)	5,460
Total period (nonmanufacturing) cost	<u>\$ 9,100</u>

c.

Direct materials	\$ 5.10
Direct labor	3.45
Variable manufacturing overhead	1.40
Sales commissions	0.35
Variable administrative expense	0.35
Variable cost per unit sold	<u>\$ 10.65</u>

d.

Variable cost per unit sold (a)	\$ 10.65
Number of units sold (b)	6,200
Total variable costs (a) × (b)	<u>\$ 66,030</u>

e.

Total fixed manufacturing overhead cost (\$3.50 per unit × 5,200 units*) (a)	\$18,200
Number of units produced (b)	6,200
Average fixed manufacturing cost per unit produced (a) ÷ (b)	<u>\$ 2.94</u>

*The average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 5,200 units.

f.

Fixed manufacturing overhead per unit	\$ 3.50
Number of units produced	5,200
Total fixed manufacturing overhead cost	<u>\$ 18,200</u>

g.

Total variable manufacturing overhead cost (\$1.40 per unit × 6,200 units)	\$ 8,680
Total fixed manufacturing overhead cost (\$3.50 per unit × 5,200 units*)	18,200
Total manufacturing overhead cost (a)	<u>\$ 26,880</u>
Number of units produced (b)	6,200
Manufacturing overhead per unit (a) ÷ (b)	<u>\$ 4.34</u>

*The average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 5,200 units.

h.

Selling price per unit	\$ 22.60
Direct materials	\$ 5.10
Direct labor	3.45
Variable manufacturing overhead	1.40
Sales commissions	0.35
Variable administrative expense	0.35
Variable cost per unit sold	<u>10.65</u>
Contribution margin per unit	<u>\$ 11.95</u>

i.

Direct materials	\$ 5.10
Direct labor	3.45
Direct manufacturing cost per unit (a)	<u>\$ 8.55</u>
Number of units produced (b)	4,200
Total direct manufacturing cost (a) × (b)	<u>\$ 35,910</u>

j.

Total variable manufacturing overhead cost (\$1.40 per unit × 4,200 units)	\$ 5,880
Total fixed manufacturing overhead cost (\$3.50 per unit × 5,200 units*)	<u>18,200</u>
Total indirect manufacturing cost	<u>\$ 24,080</u>

*The average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 5,200 units.

k.

Direct materials	\$ 5.10
Direct labor	3.45
Variable manufacturing overhead	1.40
Incremental manufacturing cost	<u>\$ 9.95</u>

References

Worksheet

Learning Objective: 01-01 Understand cost classifications used for assigning costs to cost objects: direct costs and indirect costs.

Learning Objective: 01-04 Understand cost classifications used to predict cost behavior: variable costs, fixed costs, and mixed costs.

TB Problem Qu. 1-275 (Algo) Saxbury Corporation's relevant range of activity...

Learning Objective: 01-02 Identify and give examples of each of the three basic manufacturing cost categories. Learning Objective: 01-05 Understand cost classifications used in making decisions: relevant costs and irrelevant costs.

Difficulty: 2 Medium

Learning Objective: 01-03 Understand cost classifications used to prepare financial statements: product costs and period costs.

TB Problem Qu. 1-283 (Static) A partial listing of costs incurred at...

A partial listing of costs incurred at Boylen Corporation during March appears below:

Direct materials	\$ 181,000
Utilities, factory	\$ 10,000
Sales commissions	\$ 69,000
Administrative salaries	\$ 99,000
Indirect labor	\$ 32,000
Advertising	\$ 75,000
Depreciation of production equipment	\$ 28,000
Direct labor	\$ 120,000
Depreciation of administrative equipment	\$ 49,000

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.

Solution to TB Problem Qu. 1-283 (Static) A partial listing of costs incurred at...

a.

Product costs consist of direct materials, direct labor, and manufacturing overhead:

Direct materials	\$ 181,000	
Direct labor	120,000	
Manufacturing overhead:		
Utilities, factory	\$ 10,000	
Indirect labor	32,000	
Depreciation of production equipment	28,000	70,000
Total product cost	\$ 371,000	

b.

Period costs consist of all costs other than product costs:

Sales commissions	\$ 69,000
Administrative salaries	99,000
Advertising	75,000
Depreciation of administrative equipment	49,000
Total period cost	\$ 292,000

References

Essay

Difficulty: 2 Medium

TB Problem Qu. 1-283 (Static) A partial listing of costs incurred at...

Learning Objective: 01-03 Understand cost classifications used to prepare financial statements: product costs and period costs.

TB Problem Qu. 1-290 (Static) A number of costs and measures of activity...

A number of costs and measures of activity are listed below.

Cost Description	Possible Measure of Activity
1. Salary of production manager at a surfboard manufacturer	Surfboards produced
2. Cost of solder used in making computers	Computers produced
3. Cost of dough used at a pizza shop	Pizzas cooked
4. Janitorial wages at a surfboard manufacturer	Surfboards produced
5. Salary of the controller at a hospital	Number of patients
6. Cost of sales at an electronics store	Dollar sales
7. Cost of testing materials used in a medical lab	Tests run
8. Cost of heating an electronics store	Dollar sales
9. Cost of electricity for production equipment at a surfboard manufacturer	Surfboards produced
10. Depreciation on shelving at a book store	Dollar sales

Required:

For each item above, indicate whether the cost is MAINLY fixed or variable with respect to the possible measure of activity listed next to it.

Solution to TB Problem Qu. 1-290 (Static) A number of costs and measures of activity...

1. Salary of production manager at a surfboard manufacturer; Surfboards produced; Fixed
2. Cost of solder used in making computers; Computers produced; Variable
3. Cost of dough used at a pizza shop; Pizzas cooked; Variable
4. Janitorial wages at a surfboard manufacturer; Surfboards produced; Fixed
5. Salary of the controller at a hospital; Number of patients; Fixed
6. Cost of sales at an electronics store; Dollar sales; Variable
7. Cost of testing materials used in a medical lab; Tests run; Variable
8. Cost of heating an electronics store; Dollar sales; Fixed
9. Cost of electricity for production equipment at a surfboard manufacturer; Surfboards produced; Variable
10. Depreciation on shelving at a book store; Dollar sales; Fixed

References

Essay

Difficulty: 2 Medium

TB Problem Qu. 1-290 (Static) A number of costs and measures of activity...

Learning Objective: 01-04 Understand cost classifications used to predict cost behavior: variable costs, fixed costs, and mixed costs.

TB Problem Qu. 1-296 (Algo) Fanelli Corporation, a merchandising...

Fanelli Corporation, a merchandising company, reported the following results for July:

Number of units sold	6,700
Selling price per unit	\$ 600
Unit cost of goods sold	\$ 419
Variable selling expense per unit	\$ 62
Total fixed selling expense	\$126,200
Variable administrative expense per unit	\$ 30
Total fixed administrative expense	\$208,100

Cost of goods sold is a variable cost in this company.

Required:

a. Prepare a traditional format income statement for July.

b. Prepare a contribution format income statement for July.

Solution to TB Problem Qu. 1-296 (Algo) Fanelli Corporation, a merchandising...

Explanation:

a.

Sales (6,700 units × \$600 per unit) = \$4,020,000

Cost of goods sold (6,700 units × \$419 per unit) = \$2,807,300

Selling expense ((6,700 units × \$62 per unit) + \$126,200) = \$541,600

Administrative expense ((6,700 units × \$30 per unit) + \$208,100) = \$409,100

b.

Sales (6,700 units × \$600 per unit) = \$4,020,000

Cost of goods sold (6,700 units × \$419 per unit) = \$2,807,300

Variable selling expense (6,700 units × \$62 per unit) = \$415,400

Variable administrative expense (6,700 units × \$30 per unit) = \$201,000

References

Worksheet

Difficulty: 2 Medium

TB Problem Qu. 1-296 (Algo) Fanelli Corporation, a merchandising... Learning Objective: 01-06
Prepare income statements for a merchandising company using the traditional and contribution formats.