

## 1. Award: 1.00 point

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An important first step in studying managerial accounting is to create a framework for thinking about the various types of costs incurred by organizations and how those costs are actively managed.

- True  
 False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

## 2. Award: 1.00 point

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Different cost concepts and classifications are used for different purposes.

- True  
 False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

3.

Award: 1.00 point

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Inventoriable costs are expensed when incurred.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

4.

Award: 1.00 point

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Another term for product cost is cost of goods sold.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

5.

Award: 1.00 point

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Finished goods inventory is ordinarily held for sale by a manufacturing company.

- True  
 False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-03 Describe the role of costs in published financial statements.

6.

Award: 1.00 point

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Selling and administrative costs are always period costs on any type of company's income statement.

- True  
 False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-03 Describe the role of costs in published financial statements.

7.

Award: 1.00 point

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There are three standard categories of manufacturing processes.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-04 List and describe four types of manufacturing processes.

8.

Award: 1.00 point

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A job shop is generally associated with high production volume.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-04 List and describe four types of manufacturing processes.

9.

Award: 1.00 point

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Manufacturing costs are classified into four categories.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

10.

Award: 1.00 point

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Indirect labor is **not** a component of manufacturing overhead.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

11.

Award: 1.00 point

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The following equation -- Beginning finished goods + cost of goods manufactured – ending finished goods -- is used to calculate cost of goods sold during the period.

- True  
 False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

12.

Award: 1.00 point

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The total cost of direct material, direct labor, and manufacturing overhead transferred from work-in-process inventory to finished-goods inventory is called the cost of goods manufactured.

- True  
 False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

13.

Award: 1.00 point

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A suitable cost driver for the amount of direct materials used is the number of direct labor hours worked.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

14.

Award: 1.00 point

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The higher the correlation between the cost and the cost driver, the more accurate will be the resulting understanding of cost behavior.

- True
- False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

## 15. Award: 1.00 point

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As activity changes, total variable cost increases or decreases proportionately with the activity change, but unit variable cost remains the same.

- True  
 False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 16. Award: 1.00 point

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As the activity level increases, total fixed cost remains constant and unit fixed cost remains the same.

- True  
→  False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.



17.

Award: 1.00 point

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A cost that is **not** directly traceable to a particular cost object is called an indirect cost.

- True  
 False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

18.

Award: 1.00 point

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Costs that a manager can influence significantly are classified as uncontrollable costs of that manager.

- True  
→  False

#### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

## 19. Award: 1.00 point

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Out-of-pocket costs are defined as the benefit that is sacrificed when the choice of one action precludes taking an alternative course of action.

- True
- False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

## 20. Award: 1.00 point

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Sunk costs are irrelevant to all future decisions.

- True
- False

### References

True / False

Difficulty: 1 Easy

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

## 21. Award: 1.00 point

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Which of the following statements is true?

- The word "cost" has the same meaning in all situations in which it is used.
- Cost data, once classified and recorded for a specific application, are appropriate for use in any application.
- Different cost concepts and classifications are used for different purposes.
- All organizations incur the same types of costs.
- Costs incurred in one year are always meaningful in the following year.

It is true that different cost concepts and classifications are used for different purposes.

### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

## 22. Award: 1.00 point

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At the most basic level, a cost may be defined as a(n):

- long-term asset.
- data classified for a specific application.
- sacrifice made to achieve a particular purpose.
- useful information for planning.
- suggestion for improvement.

At the most basic level, a cost may be defined as the sacrifice made to achieve a particular purpose, usually measured by the resources expended or given up.

### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

## 23. Award: 1.00 point

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Cost data that are classified and recorded in a particular way for one purpose may be inappropriate for another use. For example, which of the following costs would not be a reasonable measure of a plant manager's performance?

- net income compared to other plants.
- comparison of current period performance costs to planned performance costs of the plant.
- the increase or decrease in depreciation costs for the plant and its equipment.
- penalty costs during each period for orders not completed on time by the plant.
- bonuses earned by plant workers for on-time production.

The increase or decrease in depreciation cost would not be a reasonable performance measure.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

## 24. Award: 1.00 point

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Cost data that are classified and recorded in a particular way for one purpose may be inappropriate for another use. For example, costs that would likely be noncontrollable by a department supervisor include

- labor used in department production.
- materials used in department production.
- insurance on the plant where the department is housed.
- overtime pay earned by workers in the department.
- bonuses earned by department workers for on-time production.

Insurance for the plant is likely a noncontrollable cost by the department supervisor.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-01 Explain what is meant by the word cost.

## 25. Award: 1.00 point

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Research and development costs are classified as:

- product costs.
- period costs.
- inventoriable costs.
- cost of goods sold.
- labor costs.

Research and development costs are classified as period costs.

### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 26. Award: 1.00 point

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Product costs are:

- expensed when incurred.
- inventoried.
- treated in the same manner as period costs.
- treated in the same manner as advertising costs.
- subtracted from cost of goods sold.

Product costs are inventoried.

### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

27.

Award: 1.00 point

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Which of the following is a product cost?

- Circuitry used in producing hard drives.
- Monthly advertising in the newspaper.
- The salary of the vice president-finance.
- Sales commissions.
- Research costs for new router development.

Circuitry used in manufacturing hard drives is a product cost.

#### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

28.

Award: 1.00 point

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Which of the following would **not** be classified as a product cost?

- Direct materials.
- Direct labor.
- Indirect materials.
- Insurance on a manufacturing plant.
- Sales bonuses for meeting quota sales.

Sales bonuses are not product costs.

#### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 29. Award: 1.00 point

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The accounting records of Dixon Company revealed the following costs: direct materials used, \$250,000; direct labor, \$425,000; manufacturing overhead, \$375,000; and selling and administrative expenses, \$220,000. Dixon's product costs total:

- \$1,050,000.
- \$830,000.
- \$895,000.
- \$1,270,000.
- None of the answers is correct.

Product costs = Direct materials used + Direct labor + Manufacturing overhead = \$250,000 + \$425,000 + \$375,000 = \$1,050,000

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 30. Award: 1.00 point

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Costs that are expensed when incurred are called:

- product costs.
- direct costs.
- inventoriable costs.
- period costs.
- indirect costs.

Period costs are expensed when incurred.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

31.

Award: 1.00 point

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Which of the following is a period cost?

- Direct material.
- Advertising expense.
- Indirect labor.
- Miscellaneous supplies used in production activities.
- Factory foreman salary for the motor production line.

Advertising expense is a period cost.

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

32.

Award: 1.00 point

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Which of the following is **not** a period cost?

- Legal costs.
- Public relations costs.
- Sales commissions.
- Wages of assembly-line workers.
- The salary of a company's chief financial officer (CFO).

The wages of assembly line workers are not period costs.

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.



### 33. Award: 1.00 point

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The accounting records of Younkin Corporation revealed the following selected costs: Sales commissions, \$65,000; plant supervision, \$190,000; and administrative expenses, \$185,000. Younkin's period costs total:

- \$250,000.
- \$440,000.
- \$375,000.
- \$255,000.
- \$185,000.

Period costs = Sales commissions + Administrative expenses = \$65,000 + \$185,000 = \$250,000.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 34. Award: 1.00 point

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Shu Corporation recently computed total product costs of \$567,000 and total period costs of \$420,000, excluding \$35,000 of sales commissions that were overlooked by the company's administrative assistant. On the basis of this information, Shu's income statement should reveal operating expenses of:

- \$35,000.
- \$420,000.
- \$455,000.
- \$567,000.
- \$602,000.

Operating expenses = Period costs + Excluded sales commissions = \$420,000 + \$35,000 = \$455,000.

### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 35. Award: 1.00 point

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Which of the following would **not** be a period cost?

- Sales salaries.
- Sales commissions.
- Tamper-proof packaging.
- Legal costs.
- Accounting costs.

Tamper-proof packaging would not be a period cost.

### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 36. Award: 1.00 point

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Which of the following entities would most likely have raw materials, work in process, and finished goods?

- A petroleum refiner.
- A national department store.
- A carpet cleaning company.
- A regional airline.
- A state university.

A petroleum refiner would be most likely to have these three inventories.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-03 Describe the role of costs in published financial statements.

## 37. Award: 1.00 point

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Selling and administrative expenses would likely appear on the balance sheet of:

- A clothing store.
- A computer manufacturer.
- A television network.
- All of these firms.
- None of these firms.

All the expenses are found on the income statement, not the balance sheet.

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-03 Describe the role of costs in published financial statements.

38. Award: 1.00 point

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Which of the following inventories would a discount retailer report as an asset?

- Raw materials.
- Work in process.
- Finished goods.
- Merchandise inventory.
- All of the answers are correct.

Retailers purchase their merchandise inventories from wholesalers, who get the inventory from manufacturers.

**References**

**Multiple Choice** Difficulty: 2 Medium Learning Objective: 02-03 Describe the role of costs in published financial statements.

39. Award: 1.00 point

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Which of the following inventories would a company ordinarily hold for sale?

- Raw materials.
- Work in process.
- Finished goods.
- Raw materials and finished goods.
- Work in process and finished goods.

Inventories held for sale by manufacturers are finished goods.

**References**

**Multiple Choice** Difficulty: 2 Medium Learning Objective: 02-03 Describe the role of costs in published financial statements.

40. Award: 1.00 point

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Ford Motor Company produces cars and trucks. Which type of production process is most likely used by Ford?

- Batch.
- Job Shop.
- Continuous Flow.
- Assembly.
- None of these answers is correct.

Ford most likely uses an Assembly production process for few major products, low diversity and high volume.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

41. Award: 1.00 point

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Which of the four items listed below is **not** a type of production process?

- Batch.
- Job Shop.
- Continuous Flow.
- Job Flow.
- Assembly.

Job flow is not a type of production process.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

## 42. Award: 1.00 point

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Which type of production process is ideal for a low production volume and one-of-a-kind products?

- Batch.
- Continuous Flow.
- Job Shop.
- Assembly.
- Direct assembly.

One-of-a-kind products are ideally made in a job shop process.

### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

## 43. Award: 1.00 point

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Which type of production process is likely used for custom yachts built by Hargrave?

- Batch.
- Continuous Flow.
- Job Shop.
- Assembly.
- Direct assembly.

Custom yachts are most likely produced by a job shop process.

### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

44. Award: 1.00 point

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Comet Computer Company, a manufacturer of computers and peripheral devices, purchases computer parts such as motherboards, computer chips, hard drives, and displays, and then assembles these parts into a variety of non-customized devices, such as tablet computers, laptops, and desktop computers. Comet's products are available in a limited regional distribution. Which type of production process is most likely used by Comet Computer Company?

- Batch.
- Continuous Flow.
- Job Shop.
- Assembly.
- None of these answers is correct.

Comet would most likely use a batch process for multiple products at low volume.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

45. Award: 1.00 point

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Which type of production process is likely used by a paint manufacturer to produce paint?

- Batch.
- Continuous Flow.
- Job Shop.
- Assembly.
- Direct assembly.

Continuous flow would likely be used to make paint.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-04 List and describe four types of manufacturing processes.

46. Award: 1.00 point

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Which of the following would **not** be classified as direct materials by a company that makes automobiles?

- Wheel lubricant.
- Tires.
- Interior leather.
- CD player.
- Sheet metal used in the automobile's body.

Wheel lubricant would not be classified as direct materials, but instead as indirect materials.

**References**

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

47. Award: 1.00 point

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Which of the following employees of a commercial printer/publisher would be classified as direct labor?

- Book binder.
- Plant security guard.
- Sales representative.
- Plant supervisor.
- Payroll supervisor.

A book binder would be classified as direct labor.

**References**

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.



48. Award: 1.00 point

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Guaranteed Appliance Co. produces washers and dryers in an assembly-line process. Labor costs incurred during a recent period were: corporate executives, \$500,000; assembly-line workers, \$180,000; security guards, \$45,000; and plant supervisor, \$110,000. The total of Guaranteed's direct labor cost was:

- \$110,000.
- \$180,000.
- \$155,000.
- \$235,000.
- \$735,000.

\$180,000; the only direct labor is that associated with the actual production on the assembly line.

**References**

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

49. Award: 1.00 point

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Which of the following employees would **not** be classified as indirect labor?

- Plant Custodian.
- Salesperson.
- An employee that packs products for shipment.
- Plant security guard.
- A line employee that produces parts for chairs using a saw and template.

A line employee that produces parts for chairs using a saw and template would be direct labor since this employee is involved in making the product.

**References**

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

50. Award: 1.00 point

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Depreciation of factory equipment would be classified as:

- operating cost.
- "other" cost.
- manufacturing overhead.
- period cost.
- administrative cost.

Depreciation is classified as manufacturing overhead.

**References**

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

51. Award: 1.00 point

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Which of the following costs is **not** a component of manufacturing overhead?

- Indirect materials.
- Factory utilities.
- Factory equipment.
- Indirect labor.
- Property taxes on the manufacturing plant.

Factory equipment is not a component of manufacturing overhead.

**References**

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

## 52. Award: 1.00 point

The accounting records of Comacho Company revealed the following costs, among others:

Factory insurance	\$ 32,000
Raw material used	256,000
Customer entertainment	15,000
Indirect labor	45,000
Depreciation on salespersons' cars	22,000
Production equipment rental costs	72,000

Costs that would be considered in the calculation of manufacturing overhead total:

- \$149,000.
- \$171,000.
- \$186,000.
- \$442,000.
- None of the answers is correct.

Manufacturing Overhead Costs = Factory insurance + Indirect labor + Production equipment rental costs = \$32,000 + \$45,000 + \$72,000 = \$149,000.

### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

53. Award: 1.00 point

Cost of goods manufactured for Branson Books for the year was \$860,000. Beginning work-in-process inventory was \$40,000. Ending work-in-process was \$60,000. If the beginning finished goods inventory was \$400,000 and the ending finished goods inventory was \$990,000 what was the cost of goods sold for the year?

- \$230,000.
- \$270,000.
- \$460,000.
- \$1,240,000.
- None of these answers is correct.

$\$400,000 + \$860,000 - \$990,000 = \$270,000.$

References

Multiple Choice Difficulty: 2 Medium Learning Objective: 02-05 Give examples of three types of manufacturing costs.

54. Award: 1.00 point

Which of the following statements is correct?

- Overtime premiums should be treated as a component of manufacturing overhead.
- Overtime premiums should be treated as a component of direct labor.
- Idle time should be treated as a component of direct labor.
- Idle time should be accounted for as a special type of loss.
- Overtime premiums should be treated as a component of direct labor and idle time should be treated as a component of direct labor.

Overtime premiums should be treated as a component of manufacturing overhead.

References

Multiple Choice Difficulty: 2 Medium Learning Objective: 02-05 Give examples of three types of manufacturing costs.

55. Award: 1.00 point

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Conversion costs are:

- direct material, direct labor, and manufacturing overhead.
- direct material and direct labor.
- direct labor and manufacturing overhead.
- prime costs.
- period costs.

Direct labor and manufacturing overhead are used to convert materials and are therefore called conversion costs.

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

56. Award: 1.00 point

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Prime costs are comprised of:

- direct materials and manufacturing overhead.
- direct labor and manufacturing overhead.
- direct materials, direct labor, and manufacturing overhead.
- direct materials and direct labor.
- direct materials and indirect materials.

Prime costs are composed of direct materials and direct labor.

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

57.

Award: 1.00 point

The costs of direct materials are classified as:

	Conversion cost	Manufacturing cost	Prime cost
A.	Yes	Yes	Yes
B.	No	No	No
C.	No	Yes	Yes
D.	Yes	No	No
E.	No	Yes	No

- Choice A.
- Choice B.
- Choice C.
- Choice D.
- Choice E.

Direct materials are not included in conversion costs but are included in manufacturing and prime costs.

#### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

58. Award: 1.00 point

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What would the cost of fire insurance for a manufacturing plant generally be categorized as?

- Prime cost.
- Direct material cost.
- Period cost.
- Direct labor cost.
- Product cost.

Fire insurance costs would be product costs since they are associated with the manufacturing plant.

#### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

59. Award: 1.00 point

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Conversion costs do not include:

- Depreciation
- Direct materials
- Indirect labor
- Indirect materials
- Direct labor

Conversion costs would not include direct materials.

#### References

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-05 Give examples of three types of manufacturing costs.

60. Award: 1.00 point

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How should a company that manufactures automobiles classify its partially completed vehicles?

- Supplies.
- Raw materials inventory.
- Finished goods inventory.
- Cost of goods manufactured.
- Work-in-process inventory.

Partially complete vehicles would be considered work-in-process inventory.

#### References

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.



61.

Award: 1.00 point

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Which of the following statements is true?

- Product costs affect only the balance sheet.
- Product costs affect only the income statement.
- Period costs affect only the balance sheet.
- Neither product costs nor period costs affect the Statement of Retained Earnings. This can also be a true statement if the period costs were prepaid (i.e., prepaid advertising, depreciation).
- Product costs eventually affect both the balance sheet and the income statement.

Product costs eventually affect both the balance sheet and the income statement.

#### References

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

62. Award: 1.00 point

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In a manufacturing company, the cost of goods completed during the period would include which of the following elements?

- Raw materials used.
- Beginning finished goods inventory.
- Marketing costs.
- Depreciation of delivery trucks.
- All of the answers are correct.

Cost of goods completed during the period would include raw materials used.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

63. Award: 1.00 point

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Which of the following equations is used to calculate cost of goods sold during the period?

- Beginning finished goods + cost of goods manufactured + ending finished goods.
- Beginning finished goods – ending finished goods.
- Beginning finished goods + cost of goods manufactured.
- Beginning finished goods + cost of goods manufactured – ending finished goods.
- Beginning finished goods + ending finished goods – cost of goods manufactured.

The equation to calculate cost of goods sold during the period is: Beginning finished goods + cost of goods manufactured – ending finished goods.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

64. Award: 1.00 point

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Work-in-process inventory is composed of:

- direct material and direct labor.
- direct labor and manufacturing overhead.
- direct material and manufacturing overhead.
- direct material, direct labor, and manufacturing overhead.
- direct material only.

Direct material, direct labor, and manufacturing overhead make up work-in-process inventory.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

65. Award: 1.00 point

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If the beginning monthly balance of materials inventory was \$37,000, the ending balance was \$39,500, and \$257,800 of materials were used, the cost of materials purchased during the month is:

- \$255,300.
- \$257,800.
- \$260,300.
- \$297,300.
- None of these answer choices is correct.

Materials purchased =  $\$257,800 + \$39,500 - \$37,000 = \$260,300$ .

**References**

**Multiple Choice**    Difficulty: 3 Hard    Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

66. Award: 1.00 point

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Harrison Industries began July with a finished-goods inventory of \$48,000. The finished-goods inventory at the end of July was \$56,000 and the cost of goods sold during the month was \$125,000. The cost of goods manufactured during July was:

- \$104,000.
- \$125,000.
- \$117,000.
- \$133,000.
- None of the answers is correct.

Cost of goods manufactured in July = (Ending finished goods – Beginning finished goods) + Cost of goods sold (\$56,000 – 48,000) + \$125,000 = \$133,000.

#### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

**67.**

Award: 1.00 point

Texas Plating Company reported a cost of goods manufactured of \$520,000, with the firm's year-end balance sheet revealing work in process and finished goods of \$70,000 and \$134,000, respectively. If supplemental information disclosed raw materials used in production of \$80,000, direct labor of \$140,000, and manufacturing overhead of \$240,000, the company's beginning work in process must have been:

- \$130,000.
- \$10,000.
- \$66,000.
- \$390,000.
- None of the answers is correct.

Ending Work-in-Process + Cost of goods manufactured – Raw materials – Direct labor – Manufacturing Overhead = Beginning Work-in-Process  
 $\$70,000 + 520,000 - 80,000 - 140,000 - 240,000 = \$130,000.$

#### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

68. Award: 1.00 point

The accounting records of Falcon Company revealed the following information:

Raw materials used	\$ 60,000
Direct labor	125,000
Manufacturing overhead	360,000
Work-in-process inventory, 1/1	50,000
Finished-goods inventory, 1/1	189,000
Work-in-process inventory, 12/31	76,000
Finished-goods inventory, 12/31	140,000

Falcon's cost of goods manufactured is:

- \$519,000.
- \$522,000.
- \$568,000.
- \$571,000.
- None of the answers is correct.

Cost of goods manufactured = [Raw materials + Direct labor + Manufacturing Overhead] – Change in WIP = [\$60,000 + \$125,000 + \$360,000] – (\$76,000 – \$50,000) = \$519,000

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

69. Award: 1.00 point

The accounting records of Stingray Company revealed the following information:

Total manufacturing costs	\$530,000
Work-in-process inventory, 1/1	56,000
Finished-goods inventory, 1/1	146,000
Work-in-process inventory, 12/31	78,000
Finished-goods inventory, 12/31	123,000

Stingray's cost of goods sold is:

- \$508,000.
- \$529,000.
- \$531,000.
- \$553,000.
- None of the answers is correct.

Cost of Goods sold = Total manufacturing costs - (Change in WIP) + (Change in Finished Goods) =  
\$530,000 - (\$78,000 - \$56,000) + (\$146,000 - \$123,000) = \$531,000.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

## 70. Award: 1.00 point

The accounting records of Upton Company revealed the following information:

Cost of goods manufactured	\$ 754,000
Work-in-process inventory, 1/1	58,000
Finished-goods inventory, 1/1	125,000
Work-in-process inventory, 12/31	49,000
Finished-goods inventory, 12/31	158,000

Upton's cost of goods sold is:

- \$721,000.
- \$730,000.
- \$778,000.
- \$787,000.
- None of the answers is correct.

Cost of Goods Sold = Cost of goods manufactured – change in Finished Goods = \$754,000 – (\$158,000 – \$125,000) = \$721,000.

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.



**71.**

Award: 1.00 point

For the year just ended, Porter Corporation's manufacturing costs (raw materials used, direct labor, and manufacturing overhead) totaled \$1,500,000. Beginning and ending work-in-process inventories were \$60,000 and \$90,000, respectively. Porter's balance sheet also revealed respective beginning and ending finished-goods inventories of \$250,000 and \$180,000. On the basis of this information, how much would the company report as cost of goods manufactured (CGM) and cost of goods sold (CGS)?

- CGM, \$1,430,000; CGS, \$1,460,000.
- CGM, \$1,470,000; CGS, \$1,540,000.
- CGM, \$1,530,000; CGS, \$1,460,000.
- CGM, \$1,570,000; CGS, \$1,540,000.
- None of these.

Cost of Goods Manufactured = Product cost during year – change in WIP = \$1,500,000 – (\$90,000 – \$60,000) = \$1,470,000; Cost of goods sold = Product costs for year – change in WIP + Change in Finished goods = [\$1,500,000 – (\$90,000 – \$60,000)] + (\$250,000 – \$180,000) = \$1,540,000.

#### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

72.

Award: 1.00 point

Jamison Supplies has a cost of goods manufactured for the year of \$860,000. Beginning work-in-process inventory was \$50,000 and ending work-in-process was \$60,000. If Jamison's beginning finished goods inventory was \$500,000 and the ending finished goods inventory was \$990,000, what was the company's cost of goods sold for the year?

- \$360,000.
- \$370,000.
- \$490,000.
- \$1,350,000.
- None of the answers is correct.

Cost of goods sold = beginning finished goods + Cost of goods manufactured – ending finished goods inventory = \$500,000 + \$860,000 – \$990,000 = \$370,000.

#### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

73.

Award: 1.00 point

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Rainier Industries has Raw materials inventory on January 1, 20x8 of \$32,500 and Raw materials inventory on December 31, 20x8 of \$26,700. If purchases of raw materials were \$135,000 during the year, what was the amount of raw materials used during the year?

- \$129,200.
- \$140,800.
- \$135,000.
- \$146,600.
- None of the answers is correct.

Raw materials used during the year = Purchased raw materials + (change in Raw material balances) =  
 $\$135,000 + (\$32,500 - \$26,700) = \$140,800.$

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

## 74. Award: 1.00 point

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Rainier Industries has Raw materials inventory on January 1, 20x8 of \$32,500 and Raw materials inventory on December 31, 20x8 of \$26,700. If raw materials used during the year were \$135,000 what was the amount of raw materials purchased during the year?

- \$129,200.
- \$140,800.
- \$135,000.
- \$146,600.
- None of the answers is correct.

Raw materials purchased = Raw materials used – (change in Raw material balances) = \$135,000 – (\$32,500 – \$26,700) = \$129,200.

### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

75.

Award: 1.00 point

Compton Inc. has a beginning materials inventory balance for May of \$27,500, and an ending balance for May of \$28,750. Materials used during the month were \$128,900. As a result, what is the cost of materials purchased during the month?

- \$101,400.
- \$127,650.
- \$130,150.
- \$157,650.
- None of the answers is correct.

Raw materials purchased = Raw materials used – (change in Raw material balances) = \$128,900 – (\$27,500 – \$28,750) = \$130,150.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

76. Award: 1.00 point

Beckett Industries has the following beginning and ending inventories for the month of April.

	April 1	April 30
Direct materials	\$ 67,000	\$62,000
Work-in-process	145,000	171,000
Finished goods	85,000	78,000

Production data for the month of April is:

Direct labor	\$200,000
Actual overhead	132,000
Direct materials purchased	163,000
Transportation in	4,000
Purchase Returns and Allowances	2,000

Beckett uses one overhead control account and charges overhead to production at 70% of direct labor cost. The company does not formally recognize over- or underapplied overhead until year-end.

What was the cost of the materials used by Beckett in April?

- \$370,000.
- \$170,000.
- \$363,000.
- \$168,000.
- None of the answers is correct.

Beg. Inv. + Purchases + Trans.In -Purch. Returns = Materials Avail for Use – End Inv = Materials used  
 $= \$67,000 + \$163,000 + \$4,000 - \$2,000 = \$232,000 - \$62,000 = \$170,000$

### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

77.

Award: 1.00 point

Beckett Industries has the following beginning and ending inventories for the month of April.

	April 1	April 30
Direct materials	\$ 67,000	\$62,000
Work-in-process	145,000	171,000
Finished goods	85,000	78,000

Production data for the month of April is:

Direct labor	\$200,000
Actual overhead	132,000
Direct materials purchased	163,000
Transportation in	4,000
Purchase Returns and Allowances	2,000

Beckett uses one overhead control account and charges overhead to production at 70% of direct labor cost. The company does not formally recognize over- or underapplied overhead until year-end.

What is Beckett's total manufacturing cost for April?

- \$502,000.
- \$503,000.
- \$363,000.
- \$510,000.
- None of the answers is correct.

Materials used + Direct Labor + Overhead Applied =  $\$170,000 + \$200,000 + (70\% \times \$200,000) = \$510,000$ .

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

## 78. Award: 1.00 point

Beckett Industries has the following beginning and ending inventories for the month of April.

	April 1	April 30
Direct materials	\$ 67,000	\$62,000
Work-in-process	145,000	171,000
Finished goods	85,000	78,000

Production data for the month of April is:

Direct labor	\$200,000
Actual overhead	132,000
Direct materials purchased	163,000
Transportation in	4,000
Purchase Returns and Allowances	2,000

Beckett uses one overhead control account and charges overhead to production at 70% of direct labor cost. The company does not formally recognize over- or underapplied overhead until year-end.

What is Beckett's cost of goods transferred to finished goods inventory for April?

- \$469,000.
- \$477,000.
- \$495,000.
- \$484,000.
- None of the answers is correct.

Materials used + Direct Labor + Overhead Applied =  $\$170,000 + \$200,000 + (70\% \times \$200,000) = \$510,000$ .

Total manufacturing costs + WIP Beg Inv. - WIP End Inv. =  $\$510,000 + \$145,000 - \$171,000 = \$484,000$ .

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.



79.

Award: 1.00 point

Beckett Industries has the following beginning and ending inventories for the month of April.

	April 1	April 30
Direct materials	\$ 67,000	\$62,000
Work-in-process	145,000	171,000
Finished goods	85,000	78,000

Production data for the month of April is:

Direct labor	\$200,000
Actual overhead	132,000
Direct materials purchased	163,000
Transportation in	4,000
Purchase Returns and Allowances	2,000

Beckett uses one overhead control account and charges overhead to production at 70% of direct labor cost. The company does not formally recognize over- or underapplied overhead until year-end.

What is Beckett's cost of goods sold for April?

- \$476,000.
- \$484,000.
- \$491,000.
- \$502,000.
- None of the answers is correct.

Materials used + Direct Labor + Overhead Applied =  $\$170,000 + \$200,000 + (70\% \times \$200,000) = \$510,000$ .

Total manufacturing costs + WIP Beg Inv. - WIP End Inv. =  $\$510,000 + \$145,000 - \$171,000 = \$484,000$ .

Beg. Finished + COGM = Goods Avail for Sale - End. Finished = COGS =  $\$85,000 + \$484,000 = \$569,000 - \$78,000 = \$491,000$ .

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

## 80. Award: 1.00 point

Peyton Manufacturing has the following data:

Work-in-process inventory, January 1, 20x8	\$ 43,000
Work-in-process inventory, December 31, 20x8	48,500
Conversion costs during the year	415,000

If direct materials used during the year were \$135,000, what was cost of goods manufactured?

- \$140,500.
- \$539,000.
- \$409,500.
- \$544,500.
- None of the answers is correct.

Cost of goods manufactured = Conversion costs + Direct materials used – (change in WIP balances) =  
 $\$415,000 + \$135,000 - (\$48,500 - \$43,000) = \$544,500.$

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

**81.**

Award: 1.00 point

Peyton Manufacturing has the following data:

Work-in-process inventory, January 1, 20x8	\$ 43,000
Work-in-process inventory, December 31, 20x8	48,500
Conversion costs during the year	415,000

If the cost of goods manufactured for the year was \$565,000, what was the amount of direct materials used during the year?

- \$155,500.
- \$140,500.
- \$150,000.
- \$145,500.
- None of the answers is correct.

Direct materials used during the Year = Cost of Goods Manufactured – Conversion costs + (Change in WIP balances) = \$565,000 – \$415,000 + (\$48,500 – \$43,000) = \$155,500.

### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

82.

Award: 1.00 point

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Dorsett Technologies had finished goods inventory on January 1, 20X8 of \$29,300 and finished goods inventory on December 31, 20X8 of \$24,100. If the cost of goods manufactured for the year was \$385,000, what was the cost of goods sold for the year?

- \$395,400.
- \$385,000.
- \$390,200.
- \$400,600.
- None of the answers is correct.

Cost of Goods sold = Cost of Goods manufactured + Change in Finished goods balances = \$385,000 + (\$29,300 - \$24,100) = \$390,200.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

83. Award: 1.00 point

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Dorsett Technologies had finished goods inventory on January 1, 20X8 of \$29,300 and finished goods inventory on December 31, 20X8 of \$24,100. If the cost of goods sold for the year was \$427,500, what was the cost of goods manufactured for the year?

- \$402,100.
- \$422,300.
- \$417,100.
- \$427,500.
- None of the answers is correct.

Cost of goods manufactured – Change in Finished Goods Balances = \$427,500 – (\$29,300 – \$24,100)  
= \$422,300.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

84.

Award: 1.00 point

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Amaz-a-nation reported the following data for the year just ended: sales revenue, \$1,750,000; cost of goods sold, \$980,000; cost of goods manufactured, \$560,000; and selling and administrative expenses, \$170,000. Amaz-a-nation's gross margin would be:

- \$940,000.
- \$1,190,000.
- \$1,020,000.
- \$380,000.
- \$770,000.

Gross margin = Sales – cost of goods sold = \$1,750,000 – \$980,000 = \$770,000.

#### References

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

85.

Award: 1.00 point

Tempest Enterprises began operations on January 1, 20x1, with all of its activities conducted from a single facility. The company's accountant concluded that the year's building depreciation should be allocated as follows: selling activities, 20%; administrative activities, 35%; and manufacturing activities, 45%. If Tempest sold 60% of 20x1 production during that year, what percentage of the depreciation would appear (either directly or indirectly) on the 20x1 income statement?

- 27%.
- 45%.
- 55%.
- 82%.
- 100%.

Depreciation percentage = Selling activities + administrative activities + the part of manufacturing activities that were sold =  $20\% + 35\% + (45\% \times 60\%) = 82\%$ .

#### References

**Multiple Choice**    Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

86. Award: 1.00 point

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An employee accidentally overstated the year's advertising expense by \$50,000. Which of the following correctly depicts the effect of this error?

- Cost of goods manufactured will be overstated by \$50,000.
- Cost of goods sold will be overstated by \$50,000.
- Both cost of goods manufactured and cost of goods sold will be overstated by \$50,000.
- Cost of goods sold will be overstated by \$50,000, and cost of goods manufactured will be understated by \$50,000.
- None of the answers is correct.

None of these answer choices correctly depicts the correct effect of this error, since product costs do not include advertising expenses.

**References**

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

87. Award: 1.00 point

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Which of the following would likely be a suitable cost driver for the amount of direct materials used?

- The number of units sold.
- The number of direct labor hours worked.
- The number of machine hours worked.
- The number of units produced.
- The number of employees working in the factory.

The number of units produced is a suitable cost driver for direct materials.

**References**

**Multiple Choice**

Difficulty: 3 Hard

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.



88.

Award: 1.00 point

The choices below depict five costs of Garfield Industries and a possible driver for each cost. Which of these choices likely contains an inappropriate cost driver?

- Manufacturing overhead incurred in a heavily automated facility; direct labor hours.
- Sales commissions; gross sales revenue.
- Gasoline consumed; number of miles driven.
- Building maintenance cost; building square footage.
- Human resources department cost; number of employees.

Manufacturing overhead in a heavily automated facility would be inaccurately paired with direct labor hours as a cost driver.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

89.

Award: 1.00 point

What is the primary trade-off that an accountant must consider when deciding whether to identify cost drivers?

- Will the cost driver identification provide different costs for different purposes?
- Is the cost/benefit of the process reasonable for more accurate cost behavior obtained?
- Will the cost relationships be too complex to understand?
- Will material-related drivers be more accurate than labor-related drivers?
- There is no trade-off to consider when using cost drivers.

Cost/benefit is the primary trade-off used when deciding whether to identify cost drivers.

#### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

90. Award: 1.00 point

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Variable costs are costs that:

- vary inversely with changes in activity.
- vary directly with changes in activity.
- remain constant as activity changes.
- decrease on a per-unit basis as activity increases.
- increase on a per-unit basis as activity increases.

It is true that variable costs are costs that vary directly with changes in activity.

#### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

91. Award: 1.00 point

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As activity decreases, unit variable cost:

- increases proportionately with activity.
- decreases proportionately with activity.
- remains constant.
- increases by a fixed amount.
- decreases by a fixed amount.

As activity decreases, unit variable cost remains constant.

#### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

92. Award: 1.00 point

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As activity increases, unit variable cost:

- increases proportionately with activity.
- decreases proportionately with activity.
- remains constant.
- increases by a fixed amount.
- decreases by a fixed amount.

As activity increases, unit variable cost remains constant.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

93. Award: 1.00 point

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Which of the following is **not** an example of a variable cost?

- Straight-line depreciation on a machine that has a five-year service life.
- Wages of manufacturing workers whose pay is based on hours worked.
- Tires used in the production of tractors.
- Aluminum used to make patio furniture.
- Commissions paid to sales personnel.

Straight-line depreciation on a machine is not an example of a variable cost.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

94. Award: 1.00 point

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Fixed costs are costs that:

- vary directly with changes in activity.
- vary inversely with changes in activity.
- remain constant on a per-unit basis.
- remain constant as activity changes.
- increase on a per-unit basis as activity increases.

It is true that fixed costs remain constant as activity changes.

#### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

95. Award: 1.00 point

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The fixed cost per unit:

- will increase as activity increases.
- will decrease as activity decreases.
- will decrease as activity remains constant.
- will remain constant.
- will increase as activity decreases and will decrease as activity increases.

The fixed cost per unit will increase as activity decreases and will decrease as activity increases.

#### References

**Multiple Choice**    Difficulty: 1 Easy    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

96. Award: 1.00 point

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Which of the following is an example of a fixed cost?

- Paper used in the manufacture of textbooks.
- Property taxes paid by a firm to a large city.
- The wages of part-time workers who are paid \$8 per hour.
- Gasoline consumed by salespersons' cars.
- Surgical supplies used in a hospital's operating room.

Property taxes are an example of fixed costs.

#### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

97. Award: 1.00 point

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The true statement about cost behavior is that:

- variable costs are constant on a per-unit basis and change in total as activity changes.
- fixed costs are constant on a per-unit basis and change in total as activity changes.
- fixed costs are constant on a per-unit basis and constant in total as activity changes.
- variable costs change on a per-unit basis and change in total as activity changes.
- variable costs are constant on a per-unit basis and are constant in total as activity changes.

Variable costs are constant on a per-unit basis and they change in total as activity changes.

#### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

98. Award: 1.00 point

---

The true statement about cost behavior is that:

- variable costs change on a per-unit basis and change in total as activity changes.
- fixed costs are constant on a per-unit basis and change in total as activity changes.
- fixed costs are constant on a per-unit basis and are constant in total as activity changes.
- fixed costs change on a per-unit basis and are constant in total as activity changes.
- variable costs are constant on a per-unit basis and are constant in total as activity changes.

It is true that fixed costs change on a per-unit basis and are constant in total as activity changes.

#### References

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

99. Award: 1.00 point

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The relevant range for Maxco Industries is 10,000 to 16,000 units of product. The variable costs per unit are \$6 when a company produces 12,000 units of product. What are the variable costs per unit when 14,000 units are produced?

- \$4.50.
- \$5.00.
- \$5.50.
- \$6.00.
- None of the answers is correct.

The variable costs per unit are \$6 per unit for 12,000 units of product and \$6 per unit for 14,000 units as long as both are within the relevant range.

#### References

**Multiple Choice**    Difficulty: 3 Hard    Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 100. Award: 1.00 point

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The fixed costs per unit are \$10 when a company produces 10,000 units of product. What are the fixed costs per unit when 8,000 units are produced?

- \$12.50.
- \$10.00.
- \$8.00.
- \$6.50.
- \$5.50.

Fixed costs per unit = Total fixed costs based on 10,000 units ÷ new level of 8,000 units =  $(\$10 \times 10,000) \div 8,000 = \$12.50$  per unit.

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 101. Award: 1.00 point

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Total costs are \$180,000 when 10,000 units are produced; of this amount, variable costs are \$64,000. What are the total costs when 13,000 units are produced?

- \$199,200.
- \$214,800.
- \$234,000.
- Total costs cannot be calculated based on the information presented.
- None of the answers is correct.

Variable cost per unit =  $\$64,000 \div 10,000 = \$6.40$ ; Fixed costs =  $\$180,000 - \$64,000 = \$116,000$ ; Total costs =  $(13,000 \times \$6.40) + \$116,000 = \$199,200$ .

### References

Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 102. Award: 1.00 point

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When 5,000 units are produced variable costs are \$35 per unit and total costs are \$200,000. What are the total costs when 8,000 units are produced?

- \$200,000.
- \$305,000.
- \$240,000.
- Total costs cannot be calculated based on the information presented.
- None of the answers is correct.

Total costs = Variable costs for 8,000 units + Fixed costs (or total costs – variable costs) =  $(\$35 \times 8,000) + [\$200,000 - (\$35 \times 5,000)] = \$305,000$ .

### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 103. Award: 1.00 point

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How would a 5% sales commission paid to sales personnel be classified in a manufacturing company?

- Fixed, period cost.
- Fixed, product cost.
- Variable, period cost.
- Variable, product cost.
- Direct labor, product cost.

A sales commission would be a variable, period cost.

### References

Multiple Choice

Difficulty: 3 Hard

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.



104. Award: 1.00 point

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Which of the following would **not** be characterized as a cost object?

- A vehicle manufactured by an automobile manufacturer.
- A large city's fire department.
- A fast food restaurant located in a Midwest town.
- A regional airline flight from Atlanta to Miami.
- All of these are examples of cost objects.

All of the examples listed are cost objects.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

105. Award: 1.00 point

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Costs that can be easily traced to a specific department are called:

- direct costs.
- indirect costs.
- product costs.
- manufacturing costs.
- processing costs.

Costs that can be easily traced to a specific department are called direct costs.

**References**

**Multiple Choice**    Difficulty: 1 Easy    Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

106. Award: 1.00 point

---

Which of the following would **not** be considered a direct cost with respect to the service department of a new car dealership?

- Wages of repair technicians.
- Property taxes paid by the dealership.
- Repair parts consumed.
- Salary of the department manager.
- Depreciation on new equipment used to analyze engine problems.

Property taxes are not considered to be a direct cost.

**References**

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

107. Award: 1.00 point

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Indirect costs:

- can be traced to a cost object.
- cannot be traced to a particular cost object.
- are not important.
- are always variable costs.
- may be indirect with respect to theme park but direct with respect to one of its major attractions or rides.

It is true that indirect costs cannot be traced to a particular cost object.

**References**

**Multiple Choice**

Difficulty: 1 Easy

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

## 108. Award: 1.00 point

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Which two terms below best describe the wages paid to security guards that monitor a factory 24 hours a day?

- variable cost and direct cost.
- fixed cost and direct cost.
- variable cost and indirect cost.
- fixed cost and indirect cost.
- value-added cost and direct cost.

Fixed and indirect are two terms to describe the security guard wages at a factory.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

## 109. Award: 1.00 point

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Which one of the following costs would **not** be considered an indirect cost of serving a customer at a fast food restaurant?

- the cost of the hamburger patty in the burger the customer orders.
- the wages of the employee who cleans the tables.
- the cost of heating and lighting the kitchen.
- the salary of the restaurant's manager.
- the steam cleaning service for the grill vent.

The cost of a hamburger patty would be a direct cost.

### References

Multiple Choice

Difficulty: 1 Easy

Learning Objective: 02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

110. Award: 1.00 point

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The salary that is sacrificed by a college student who pursues a degree full time is a(n):

- sunk cost.
- out-of-pocket cost.
- opportunity cost.
- differential cost.
- marginal cost.

The salary sacrificed is an opportunity cost.

**References**

**Multiple Choice** Difficulty: 2 Medium Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

111. Award: 1.00 point

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The tuition that will be paid next semester by a college student who pursues a degree is a(n):

- sunk cost.
- out-of-pocket cost.
- indirect cost.
- average cost.
- marginal cost.

The tuition paid would be out-of-pocket costs.

**References**

**Multiple Choice** Difficulty: 2 Medium Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

112. Award: 1.00 point

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The sum of costs necessary to effect a one-unit increase in the activity level is a(n):

- Differential cost.
- Opportunity cost.
- Marginal cost.
- Sunk cost.
- None of the answers is correct.

A one-unit increase in activity level is known as marginal cost.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

113. Award: 1.00 point

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Which of the following costs should be ignored when choosing among alternatives?

- Opportunity costs.
- Sunk costs.
- Out-of-pocket costs.
- Differential costs.
- None of the answers is correct.

Costs that should be ignored when choosing among alternatives are sunk costs.

**References**

**Multiple Choice**    Difficulty: 2 Medium    Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

# 114.

Award: 1.00 point

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If the total cost of alternative A is \$50,000 and the total cost of alternative B is \$34,000, then \$16,000 is termed the:

- opportunity cost.
- average cost.
- sunk cost.
- out-of-pocket cost.
- differential cost.

The difference between alternative A and alternative B total costs is the differential cost.

## References

**Multiple Choice**

Difficulty: 2 Medium

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

# 115. Award: 1.00 point

Play Time is a nursery school for pre-kindergarten children. The school has determined that the following biweekly revenues and costs occur at different levels of enrollment:

Number of Students Enrolled	Total Revenue	Total Costs
10	\$ 3,000	\$ 2,100
15	4,500	2,700
16	4,800	2,800
20	6,000	3,200
21	6,300	3,255

The marginal cost when the twenty-first student enrolls in the school is:

- \$55.
- \$155.
- \$300.
- \$3,045.
- \$3,255.

Difference between costs for 21 and 20 students:  $\$3,255 - \$3,200 = \$55$ .

## References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

116. Award: 1.00 point

Play Time is a nursery school for pre-kindergarten children. The school has determined that the following biweekly revenues and costs occur at different levels of enrollment:

Number of Students Enrolled	Total Revenue	Total Costs
10	\$ 3,000	\$ 2,100
15	4,500	2,700
16	4,800	2,800
20	6,000	3,200
21	6,300	3,255

The average cost per student when 16 students enroll in the school is:

- \$100.
- \$125.
- \$175.
- \$300.
- \$400.

Cost for 16 students ÷ 16 students =  $\$2,800 \div 16 = \$175$  average cost.

#### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.



117.

Award: 1.00 point

The costs that follow all have applicability for a manufacturing enterprise. Which of the choices listed correctly denotes the costs' applicability for a service provider?

	Period Cost	Uncontrollable Cost	Opportunity Cost
A.	Applicable	Applicable	Not applicable
B.	Applicable	Not applicable	Applicable
C.	Applicable	Applicable	Applicable
D.	Not applicable	Applicable	Applicable
E.	Not applicable	Applicable	Not applicable

- Choice A.
- Choice B.
- Choice C.
- Choice D.
- Choice E.

Period, uncontrollable, and opportunity costs are all applicable to a service provider.

### References

#### Multiple Choice

Difficulty: 2 Medium

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

## 118. Award: 1.00 point

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You have been asked to work an extra day and will receive \$150. However, you already bought a discounted ticket to a theme park for \$37 and figure that you will spend an additional \$50 at the park. What is the sunk cost if you decide to work?

- \$150.
- \$107.
- \$87.
- \$37.
- None of the answers is correct.

The sunk cost is that of the ticket that you will not use.

### References

**Multiple Choice** Difficulty: 3 Hard

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

# 119.

Award: 1.00 point

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Your brother is trying to sell his bicycle for \$200. He refuses to lose more than \$50 on the sale because it originally cost him \$229 when he purchased it two years ago. Which of the following would be his sunk cost?

- \$50.
- \$200.
- \$229.
- \$179.
- None of the answers is correct.

The sunk cost is that amount paid for the bicycle 2 years ago.

## References

**Multiple Choice**    Difficulty: 3 Hard

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.

120. Award: 1.00 point

Gisano's Pizza operates a restaurant that serves double-decker pizzas. The table below shows the cost incurred during a month when 900 pizzas were served.

	Number of Pizzas Served		
	800	900	1,000
Total costs:			
Fixed costs	A	\$9,900	C
Variable costs	B	8,100	D
Total costs	E	\$18,000	F
Cost per pizza:			
Fixed cost	G	H	I
Variable cost	J	K	L
Total cost per pizza	M	N	O

**Required:**

Fill in the missing amounts, labeled A through O, in the table above.

	Number of Pizzas Served		
	800	900	1,000
Total costs:			
Fixed costs	\$9,900	\$9,900	\$9,900
Variable costs	7,200	8,100	9,000
Total costs	\$17,100	\$18,000	\$18,900
Cost per pizza:			
Fixed cost	\$12.375	\$11.00	\$9.90
Variable cost	9.000	9.00	9.00
Total cost per pizza	\$21.375	\$20.00	\$18.90

*Explanatory notes:*

A and C each equal \$9,900, since fixed costs do not vary with activity.

J, K, and L each equal \$9 ( $\$8,100 \div 900$ ), since variable cost per pizza remains constant.

B equals \$7,200 ( $800 \times \$9$ )

D equals \$9,000 ( $1,000 \times \$9$ )

G equals \$12.375 ( $\$9,900 \div 800$ )

H equals \$11.00 ( $\$9,900 \div 900$ )

I equals \$9.90 ( $\$9,900 \div 1,000$ )

**References**

Essay

Difficulty: 3 Hard

Learning Objective: 02-01 Explain what is meant by the word cost.

## 121. Award: 1.00 point

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Travon and Tony (T & T) Enterprises has a single facility that it uses for manufacturing, sales, and administrative activities. Should the company's building depreciation charge be expensed in its entirety or is a different accounting procedure appropriate? Explain.

The company's depreciation charge is, in part, a period cost and, in part, a product cost. The portion that relates to selling and administrative activities should be expensed when incurred. In contrast, the portion that relates to manufacturing should be attached to the goods produced, with the costs now inventoried on the balance sheet.

### References

**Essay**

Difficulty: 3 Hard

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

## 122. Award: 1.00 point

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Manufacturers have established a cost classification called product costs. Define the term "product cost" and note where these costs appear in the financial statements. Be specific.

Product costs are costs that relate to the manufacturing process and consist of direct materials, direct labor, and manufacturing overhead. Simply stated, these are costs incurred to make a product. Product costs are attached to the units produced (i.e., work in process) and, thus, inventoried on the balance sheet. These costs are later charged to finished goods when the goods are completed. Another transfer occurs when the finished units are sold, with the costs now transferred to cost of goods sold on the income statement.

### References

#### Essay

Learning Objective:  
02-02 Distinguish  
among product  
costs, period costs,  
and expenses.

#### Difficulty: 2 Medium

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

## 123. Award: 1.00 point

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Briefly explain the four types of production processes in terms of products and volume. Then give examples of each type.

The four types of production processes are as follows:

- (1) Job shop: Low production volume; little standardization; one-of-a-kind products. Examples include custom home construction, feature film production, and ship building.
- (2) Batch: Multiple products; low volume. Examples include construction equipment, tractor trailers, and cabin cruisers.
- (3) Assembly: A few major products; higher volume. Examples include kitchen appliances and automobile assembly.
- (4) Continuous flow: High production volume; highly standardized commodity products. Examples include food processing, textiles, lumber, and chemicals.

### References

#### Essay

Learning Objective:  
02-02 Distinguish  
among product  
costs, period costs,  
and expenses.

#### Difficulty: 2 Medium

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

## 124. Award: 1.00 point

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Consider the three firms that follow: (1) a regional airline, (2) an automobile manufacturer, and (3) a discount retail store. These firms, examples of service providers, manufacturers, and merchandisers, tend to have different characteristics with respect to costs and financial-statement disclosures.

**Required:**

Determine which of the preceding firms (1, 2, and/or 3) would likely:

- A. Disclose operating expenses on the income statement.
- B. Have product costs.
- C. Have period costs.
- D. Disclose cost of goods sold on the income statement.
- E. Have no meaningful investment in inventory.
- F. Maintain raw-material, work-in-process, and finished-goods inventories.
- G. Have variable and fixed costs.

- A. 1, 2, 3
- B. 2, 3
- C. 1, 2, 3
- D. 2, 3
- E. 1
- F. 2
- G. 1, 2, 3

### References

**Essay**

Learning Objective:  
02-02 Distinguish among product costs, period costs, and expenses.

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

**Difficulty: 3 Hard**

Learning Objective:  
02-03 Describe the role of costs in published financial statements.



## 125. Award: 1.00 point

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Colton Manufacturing produces small electric engines.

**Required:**

Identify the following costs as direct materials (DM), direct labor (DL), manufacturing overhead (MOH), or a period cost (PC). Also indicate whether the cost is variable (V) or fixed (F) with respect to behavior.

- A. Commissions paid to salespeople
- B. Straight-line depreciation on the factory building
- C. Salary of the plant supervisor
- D. Wages of the assembly-line workers
- E. Machine lubricant used in production activities
- F. Engine casings used in production activities
- G. Advertising placed in trade journals
- H. Lease payments for the president's automobile
- I. Property taxes paid on the factory facilities

- A. PC, V
- B. MOH, F
- C. MOH, F
- D. DL, V
- E. MOH, V
- F. DM, V
- G. PC, F
- H. PC, F
- I. MOH, F

### References

**Essay**

Learning Objective:  
02-02 Distinguish  
among product  
costs, period costs,  
and expenses.

Learning Objective: 02-08 Describe the  
behavior of variable and fixed costs, in  
total and on a per-unit basis.

**Difficulty: 3 Hard**

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

126. Award: 1.00 point

Consider the following items:

- A. Tomatoes used in the manufacture of ketchup
- B. Administrative salaries of executives employed by a regional airline
- C. Wages of assembly-line workers at an automobile manufacturing plant
- D. Marketing expenditures of the major league baseball club
- E. Commissions paid to the salespeople working for a soft drink company
- F. Straight-line depreciation on manufacturing equipment owned by a computer manufacturer
- G. Shipping charges incurred by office supplies retailer on out-going orders
- H. Speakers used in a consumer electronics company's home-theater systems
- I. Insurance costs related to a cosmetics manufacturing plant

**Required:**

Complete the table that follows and classify each of the costs listed as (1) a product or period cost and (2) a variable or fixed cost by placing an "X" in the appropriate column.

Item	Product or Period Cost		Variable or Fixed Cost	
	Product	Period	Variable	Fixed
A				
B				
C				
D				
E				
F				
G				
H				
I				

Item	Product or Period Cost		Variable or Fixed Cost	
	Product	Period	Variable	Fixed
A	X		X	
B		X		X
C	X		X	
D		X		X
E		X	X	
F	X			X
G		X	X	
H	X		X	
I	X			X

**References**

**Essay**

Learning Objective: 02-02 Distinguish among product costs, period costs, and expenses.

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

**Difficulty: 3 Hard** Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

127. Award: 1.00 point

The following selected costs were extracted from the accounting records of Louisiana Machining (LAM):

1. Direct materials used in production
2. Wages of machine operators
3. Factory utilities
4. Sales commissions
5. Salary of LAM's president
6. Factory depreciation
7. Wages of plant security guards
8. Uncollectible accounts expense
9. Machine lubricant used in production

- A. cost of goods manufactured.
- B. manufacturing overhead.
- C. total period costs.
- D. total conversion costs.
- E. total direct costs of LAM's credit and collections department.
- F. LAM's inventory cost.

**Required:**

By the use of numbers, identify the costs that would be used to calculate:

- A. 1, 2, 3, 6, 7, 9
- B. 3, 6, 7, 9
- C. 4, 5, 8
- D. 2, 3, 6, 7, 9
- E. 8
- F. 1, 2, 3, 6, 7, 9

**References**

**Essay**

Learning Objective:  
02-02 Distinguish  
among product  
costs, period costs,  
and expenses.

Learning Objective: 02-06 Prepare a  
schedule of cost of goods manufactured, a  
schedule of cost of goods sold, and an  
income statement for a manufacturer.

**Difficulty: 3 Hard**

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

Learning Objective: 02-09 Distinguish  
among direct, indirect, controllable, and  
uncontrollable costs.

## 128. Award: 1.00 point

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The income statements and balance sheets of service, retailing, and manufacturing businesses tend to differ.

**Required:**

- A. Which of these businesses will disclose a cost-of-goods-sold figure on the income statement? Why?  
B. Briefly describe the difference between a retailing firm and a manufacturer's disclosure of inventories on the balance sheet.

A. Retailers and manufacturers will disclose a cost-of-goods-sold figure because both of these entities sell goods. Service businesses, in contrast, do not, given that such firms provide services.

B. A retailer will typically disclose inventories as a one-line item entitled merchandise inventories. Manufacturers, on the other hand, carry three different types of inventories: raw materials, work in process, and finished goods.

### References

**Essay**

Difficulty: 2 Medium

Learning Objective: 02-03 Describe the role of costs in published financial statements.

## 129. Award: 1.00 point

Consider the following cost items:

1. Sales commissions earned by a company's sales force.
2. Raw materials purchased during the period.
3. Current year's depreciation on a firm's manufacturing facilities.
4. Year-end completed production of a carpet manufacturer.
5. The cost of products sold to customers of an apparel store.
6. Wages earned by machine operators in a manufacturing plant.
7. Income taxes incurred by an airline.
8. Marketing costs of an electronics manufacturer.
9. Indirect labor costs incurred by a manufacturer of office equipment.

**Required:**

- A. Evaluate the costs just cited and determine whether the associated dollar amounts would appear on the firm's balance sheet, income statement, or schedule of cost of goods manufactured.
- B. What major asset will normally be insignificant for service enterprises and relatively substantial for retailers, wholesalers, and manufacturers? Briefly discuss.
- C. Briefly explain the similarity and difference between the merchandise inventory of a retailer and the finished-goods inventory of a manufacturer.

A.

1. Income statement
2. Schedule of cost of goods manufactured
3. Schedule of cost of goods manufactured
4. Balance sheet
5. Income statement
6. Schedule of cost of goods manufactured
7. Income statement
8. Income statement
9. Schedule of cost of goods manufactured

B. The asset that differs among these businesses is inventory. Service businesses typically carry no (or very little) inventory. Retailers and wholesalers normally stock considerable inventory. Manufacturers also carry significant inventories, typically subdivided in three categories: raw materials, work in process, and finished goods.

C. The similarity: Both inventories are carried for sale by the respective businesses. The difference: Retailers purchase merchandise inventory; in contrast, manufacturing firms produce their goods.

### References

#### Essay

Learning Objective:  
02-03 Describe the  
role of costs in  
published financial  
statements.

**Difficulty: 3 Hard** Learning Objective:  
02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

## 130. Award: 1.00 point

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Briefly define and discuss the terms in each of the pairs that follow.

- A. Direct and indirect costs
- B. Direct materials and indirect materials
- C. Manufacturing overhead and direct labor

A. Direct costs are logically and practically related (i.e., easily traceable) to a particular cost object. An indirect cost, on the other hand, is not. Whether a cost is direct or indirect depends on the cost object under consideration. A cost may be easily traceable to a company, for example, but not easily traced to a department of that firm.

B. Direct materials form an integral part of the finished product and, at the same time, are easily traced to that product. Indirect materials, which are part of manufacturing overhead, generally do not meet these guidelines. Note, though, that some indirect material may be easily traced to the product (e.g., five squirts of wood glue in a piece of furniture) but it may be too costly to do so.

C. Manufacturing overhead consists of indirect materials, indirect labor, plant depreciation, factory utilities, and other factory-related costs. This cost component reflects all manufacturing costs other than direct materials and direct labor. Direct labor, in contrast, consists of wages of those employees who work directly on the goods in production (machine operators, assembly-line workers, and so forth).

### References

**Essay** Learning Objective:  
02-05 Give examples of three types of manufacturing costs.

**Difficulty: 2 Medium** Learning Objective:  
02-09 Distinguish among direct, indirect, controllable, and uncontrollable costs.

# 131. Award: 1.00 point

The following selected information was extracted from the 20x3 accounting records of Farrina Products:

Raw materials used	\$284,000
Direct labor	178,000
Indirect labor	35,000
Selling and administrative salaries	250,000
Building depreciation*	330,000
Other selling and administrative expenses	80,000
Other factory costs	620,000

\*Seventy percent of the company's building was devoted to production activities; the remaining 30% was used for selling and administrative functions.

Farrina's beginning and ending work-in-process inventories amounted to \$306,000 and \$245,000, respectively. The company's beginning and ending finished-goods inventories were \$450,000 and \$440,000, respectively.

### Required:

- Calculate Farrina's manufacturing overhead for the year.
- Calculate Farrina's cost of goods manufactured.
- Compute Farrina's cost of goods sold.

The answers include:

A. Manufacturing overhead =  $\$35,000 + (\$330,000 \times .7) + \$620,000 = \mathbf{\$886,000}$

B. COGM =  $\$306,000 + \$1,348,000 (\$284,000 + \$178,000 + \$886,000) = \$1,654,000 - \$245,000 = \mathbf{\$1,409,000}$

C. COGS =  $\$450,000 + \$1,409,000 = \$1,859,000 - \$440,000 = \mathbf{\$1,419,000}$

### References

#### Essay

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

#### Difficulty: 3 Hard

Learning Objective:  
02-06 Prepare a  
schedule of cost of  
goods manufactured,  
a schedule of cost of  
goods sold, and an  
income statement for  
a manufacturer.

132. Award: 1.00 point

Miao Manufacturing, which began operations on January 1 of the current year, produces an industrial scraper that sells for \$325 per unit. Information related to the current year's activities follows.

Number of scrapers produced	20,000
Number of scrapers sold	17,000
Variable costs per unit:	
Direct materials	\$25
Direct labor	35
Manufacturing overhead	60
Annual fixed costs:	
Manufacturing overhead	\$400,000
Selling and administrative	140,000

Miao carries its finished-goods inventory at the average unit cost of production. There was no work in process at year-end.

**Required:**

- Compute the company's average unit cost of production.
- Determine the cost of the December 31 finished-goods inventory.
- Compute the company's cost of goods sold.
- If next year's production increases to 23,000 units and general cost behavior patterns do not change, what is the likely effect on:
  - The direct-labor cost of \$35 per unit? Why?
  - The fixed manufacturing overhead cost of \$400,000? Why?

A.	
Fixed manufacturing overhead per unit:	
(\$400,000 ÷ 20,000) scrapers produced =	\$20
Average manufacturing unit cost:	
Direct materials	\$25
Direct labor	35
Variable manufacturing overhead	60
Fixed manufacturing overhead	<u>20</u>
Average unit cost	<u>\$140</u>
B. Production (units)	20,000
Sales (units)	<u>17,000</u>
Ending finished-goods inventory (units)	<u>3,000</u>
3,000 × \$140 = \$420,000	
C. Finished Goods, Jan. 1	\$ -----
Add: Cost of Goods Manufactured (20,000 × \$140)	<u>2,800,000</u>
Cost of goods available for sale	\$ 2,800,000
Deduct: Finished Goods, Dec. 31	<u>420,000</u>
Cost of goods sold	<u>\$ 2,380,000</u>

- D.
- No change. Direct labor is a variable cost, and the cost per unit will remain constant.
  - No change. Despite the increase in the number of units produced, this is a fixed cost, which remains the same in total.



## References

### Essay

Learning Objective:  
02-05 Give examples  
of three types of  
manufacturing costs.

Learning Objective: 02-08 Describe the  
behavior of variable and fixed costs, in  
total and on a per-unit basis.

### Difficulty: 3 Hard

Learning Objective:  
02-06 Prepare a  
schedule of cost of  
goods manufactured,  
a schedule of cost of  
goods sold, and an  
income statement for  
a manufacturer.

# 133. Award: 1.00 point

Portland Manufacturing had the following data for the period just ended:

Work in process, Jan. 1	\$ 21,000
Work in process, Dec. 31	40,000
Finished goods, Jan. 1	70,000
Finished goods, Dec. 31	61,000
Direct materials used	126,000
Direct labor	260,000
Factory depreciation	80,000
Sales	945,000
Advertising expense	52,000
Factory utilities	27,000
Indirect materials	19,000
Indirect labor	35,000

### Required:

- Calculate Portland's cost of goods manufactured.
- Calculate Portland's cost of goods sold.

A.	
Direct material used	\$ 126,000
Direct labor	260,000
Manufacturing overhead:	
Factory Depreciation	80,000
Factory Utilities	27,000
Indirect materials	19,000
Indirect labor	<u>35,000</u>
Total manufacturing costs	\$ 547,000
Add: Work in process, Jan. 1	<u>21,000</u>
	\$568,000
Deduct: Work in process, Dec. 31	<u>40,000</u>
Cost of goods Manufactured	\$ <u>528,000</u>
B. Finished Goods, Jan. 1	\$ 70,000
Add: Cost of Goods Manufactured	<u>528,000</u>
Cost of goods available for sale	\$ 598,000
Finished Goods, Dec. 31	<u>61,000</u>
Cost of goods sold	\$ <u>537,000</u>

### References

Essay

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

# 134. Award: 1.00 point

Frontline Industries has the following beginning and ending inventories for the month of June.

	June 1	June 30
Direct materials	\$80,000	\$72,000
Work-in-process	140,000	181,000
Finished goods	85,000	75,000

Production data for the month of June is:

Direct labor	\$110,000
Actual overhead	72,000
Direct materials purchased	153,000
Transportation in	6,000
Purchase Returns and Allowances	3,000

Frontline uses one overhead control account and charges overhead to production at 70% of direct labor cost. The company does not formally recognize over- or underapplied overhead until year-end.

- What was the cost of the materials used by Frontline in June?
- What is Frontline's total manufacturing cost for June?
- What is Frontline's cost of goods transferred to finished goods inventory for June?
- What is Frontline's cost of goods sold for June?

(a) Materials used:

Beginning Materials Inventory	\$ 80,000
Plus purchases	153,000
Plus transportation in	6,000
Less purchase returns	(3,000)
Materials available for use	\$236,000
Less ending materials inventory	(72,000)
Materials used	\$164,000

(b) Total manufacturing costs = Materials used + Direct labor + Overhead applied = \$164,000 + \$110,000 + (\$110,000 × 70%) = \$351,000

(c) Goods transferred = Total manufacturing costs + Begin. Work-in-process – End. Work-in-Process = \$351,000 + \$140,000 – \$181,000 = \$310,000

(d) Cost of Goods sold:

Beginning finished goods inventory	\$85,000
Plus: Cost of goods Manufactured	310,000
Goods available for sale	\$395,000
Less: Ending finished goods inventory	(75,000)
Cost of Goods Sold	\$320,000

## References

**Essay**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

135. Award: 1.00 point

Tao Company had the following inventory balances at the beginning and end of the year:

	January 1	December 31
Raw material	\$50,000	\$35,000
Work in process	130,000	170,000
Finished goods	280,000	255,000

During the year, the company purchased \$100,000 of raw material and incurred \$340,000 of direct labor costs. Other data: manufacturing overhead incurred, \$450,000; sales, \$1,560,000; selling and administrative expenses, \$90,000; income tax rate, 30%.

**Required:**

- A. Calculate cost of goods manufactured.
- B. Calculate cost of goods sold.
- C. Determine Tao's net income.

A. Direct materials used:		
Raw materials, Jan. 1	\$ 50,000	
Add: Purchases	<u>100,000</u>	
Raw materials available for use	\$150,000	
Deduct: Raw material, Dec. 31	<u>35,000</u>	
Raw material used		\$ 115,000
Direct labor		340,000
Manufacturing overhead		<u>450,000</u>
Total manufacturing costs		\$ 905,000
Add: Work in process, Jan. 1		<u>130,000</u>
		\$1,035,000
Deduct: Work in process, Dec. 31		<u>170,000</u>
Cost of goods manufactured		\$ <u>865,000</u>
B. Finished Goods, Jan. 1		\$ 280,000
Add: Cost of Goods Manufactured		<u>865,000</u>
Cost of goods available for sale		\$1,145,000
Finished Goods, Dec. 31		<u>255,000</u>
Cost of goods sold		\$ <u>890,000</u>
C. Sales Revenue		\$1,560,000
Less: Cost of goods sold		<u>890,000</u>
Gross Margin		\$ 670,000
Less: Selling and administrative expenses		<u>90,000</u>
Income before income taxes		\$ 580,000
Income tax expense (\$580,000 × 30%)		<u>174,000</u>
Net income		\$ <u>406,000</u>

**References**

Essay

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

136. Award: 1.00 point

The selected amounts that follow were taken from Hawk Corporation's accounting records:

Raw materials used	\$ 27,000
Direct labor	35,000
Total manufacturing costs	104,000
Work-in-process inventory, Jan. 1	19,000
Cost of Goods Manufactured	100,000
Cost of goods available for sale	175,000
Finished goods inventory, Dec. 31	60,000
Sales revenue	300,000
Selling and administrative expenses	125,000
Income tax expense	18,000

**Required:**

Compute the following:

- A. Manufacturing overhead.
- B. Work-in-process inventory, 12/31.
- C. Finished-goods inventory, 1/1.
- D. Cost of goods sold.
- E. Gross margin.
- F. Net income.

<i>A.</i>		
Total manufacturing costs		\$ 104,000
Less: Raw materials used	\$27,000	
Direct labor	<u>35,000</u>	<u>62,000</u>
Manufacturing overhead		<u>\$42,000</u>
<i>B.</i>		
Total manufacturing costs		\$ 104,000
Add: WIP inventory, 1/1		<u>19,000</u>
		\$123,000
Less: Cost of goods manufactured		<u>100,000</u>
WIP inventory, 12/31		<u>\$ 23,000</u>
<i>C.</i>		
Cost of goods available for sale		\$ 175,000
Less: Cost of goods manufactured		<u>100,000</u>
Finished goods inventory, 1/1		<u>\$ 75,000</u>
<i>D.</i>		
Cost of goods available for sale		\$ 175,000
Less: Finished goods inventory, 12/31		<u>60,000</u>
Cost of goods sold		<u>\$115,000</u>
<i>E.</i>		
Sales Revenue		\$ 300,000
Less: Cost of goods sold		<u>115,000</u>
Gross margin		<u>\$185,000</u>
<i>F.</i>		
Gross margin		\$185,000
Less: Selling and administrative expenses	\$125,000	
Income tax expense	<u>18,000</u>	<u>143,000</u>
Net income		<u>\$42,000</u>

## References

**Essay**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

137. Award: 1.00 point

The Enrique Company recorded the following transactions for February 20x1:

	Materials	Work in Process	Finished Goods
Purchases	\$100,000		
Beginning inventory	18,000	\$ 8,000	\$ E
Ending inventory	A	30,000	30,000
Direct materials used		90,000	
Direct labor		B	
Manufacturing overhead (includes indirect materials used of \$10,000)		115,000	
Transferred to finished goods		C	
Cost of goods sold			D

Sales were \$560,000, with sales prices determined by adding a 40% markup to the firm's manufacturing cost. The total cost of direct materials used, direct labor, and manufacturing overhead during the month was \$285,000.

Note: The materials account includes both direct materials and indirect materials.

**Required:**

Calculate the missing values.

<i>Item A.</i>	
Beginning materials	\$ 18,000
Add: Purchases	100,000
Less: Direct materials used	(90,000)
Less: Indirect materials used	<u>(10,000)</u>
Ending materials	<u>\$18,000</u>
<i>Item B.</i>	
Total production costs	\$ 285,000
Less: Direct materials used	(90,000)
Less: Manufacturing overhead	(115,000)
Direct labor	<u>\$ 80,000</u>
<i>Item C.</i>	
Beginning work in process	\$ 8,000
Add: Total production costs	285,000
Less: Ending work in process	<u>(20,000)</u>
Transferred to finished goods	<u>\$ 273,000</u>
<i>Item D.</i>	
Sales	\$560,000
Divided by rate	÷ 140%
Cost of goods sold	<u>\$400,000</u>
<i>Item E.</i>	
Ending finished goods	\$ 30,000
Add: Cost of goods sold	400,000
Less: Transferred to finished goods	<u>(273,000)</u>
Beginning finished goods	<u>\$ 157,000</u>

References



**Essay**

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

138. Award: 1.00 point

Sylvia Corporation sold 12,500 units of its single product during the year, reporting a cost of goods sold that totaled \$250,000. A review of the company's accounting records disclosed the following information:

Cost of goods sold as a percentage of sales revenue	40%
Finished goods, Jan. 1	\$87,000
Work-in-process, Dec. 31	55,000
Cost of Goods Manufactured	241,000
Raw materials used	40,000
Direct labor	74,000
Manufacturing overhead	122,000
Selling and administrative expenses	310,000

Sylvia is subject to a 30% income tax rate.

**Required:**

- A. Determine the selling price per unit.
- B. Management established a goal at the beginning of the year to reduce the company's investment in finished-goods inventory and work-in-process inventory.
  - 1. Analyze cost of goods sold and determine if management's goal was achieved with respect to finished-goods inventory. Show computations.
  - 2. Analyze the firm's manufacturing costs and determine if management's goal was achieved with respect to work-in-process inventory. Show computations.
- C. Is the company profitable? Show calculations.

A. Let X = sales revenue  
 $0.4X = \$250,000$   
 $X = \$625,000$   
 Sales revenue  $(\$625,000) \div$  units sold (12,500) = \$50 selling price

B.

1.	Cost of goods sold:	
	Finished goods, Jan. 1	\$ 87,000
	Add: Cost of goods manufactured	<u>241,000</u>
	Cost of good available for sale	\$328,000
	Deduct: Finished goods, Dec. 31	<u>???????</u>
	Cost of goods sold	<u>\$250,000</u>

Ending finished-goods inventory totals \$78,000  $(\$328,000 - \$250,000)$ , which means that inventory was reduced by \$9,000  $(\$87,000 - \$78,000)$  and management was successful in achieving its goal.

2.	Cost of goods manufactured:	
	Raw materials used	\$ 40,000
	Direct labor	74,000
	Manufacturing overhead	<u>122,000</u>
	Total manufacturing costs	\$ 236,000
	Add: Work in process, Jan. 1	<u>?????????</u>
		<u>\$?????????</u>
	Deduct: Work in process, Dec. 31	<u>55,000</u>
	Cost of Goods manufactured	<u>\$ 241,000</u>

Let X = work in process, Jan. 1  
 $\$236,000 + X - \$55,000 = \$241,000$

$X = \$60,000$

Yes, management achieved its goal because work-in-process inventory fell by \$5,000 (\$60,000 – \$55,000).

C.

Sales Revenue	\$ 625,000
Less: Cost of Goods sold	<u>250,000</u>
Gross Margin	\$ 375,000
Less: Selling and administrative expenses	<u>310,000</u>
Income before taxes	\$ 65,000
Income tax expense (\$65,000 × 30%)	<u>19,500</u>
Net income	\$ <u>45,500</u>

Yes, the company is profitable.

### References

Essay

Difficulty: 3 Hard

Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured, a schedule of cost of goods sold, and an income statement for a manufacturer.

139. Award: 1.00 point

Why are cost drivers in the airline industry considered so complex?

Cost drivers are considered so complex in the airline industry because they can depend upon the distance flown by an airplane and the passenger load factor in addition to factors that cannot be controlled by the airline, like regulatory staffing rules, airport efficiency, and the weather.

### References

Essay

Difficulty: 2 Medium

Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

140. Award: 1.00 point

Hernandez Systems began business on January 1 of the current year, producing a single product that is popular with home builders. Demand was very strong, allowing the company to sell its entire manufacturing output of 80,000 units. The following unit costs were incurred:

Manufacturing costs:	
Direct materials	\$15
Direct labor	8
Variable overhead	11
Fixed overhead	6
Selling and administrative costs:	
Variable	5
Fixed	2

Hernandez anticipates an increase in productive output to 100,000 units and sales of 95,000 units in the next accounting period. The company uses appropriate drivers to determine cost behavior and estimates.

**Required:**

A. Assuming that present cost behavior patterns continue, compute the total expected costs in the upcoming accounting period.

B. Jan Compton is about to prepare a graph that shows the unit cost behavior for variable selling and administrative cost. If the graph's horizontal axis is volume and the vertical axis is dollars, briefly describe what Compton's graph should look like.

C. Determine whether the following costs are variable or fixed in terms of behavior:

1. Yearly lease payments for a state-of-the-art cutting machine.
2. A fee paid to a consultant who provided advice about quality issues. The fee was based on the number of consulting hours provided.
3. Cost of an awards dinner for "star" salespeople.

A.

Direct materials (100,000 × \$15)	\$1,500,000
Direct labor (100,000 × \$8)	800,000
Variable overhead (100,000 × \$11)	1,100,000
Fixed overhead (80,000 × \$6)	480,000
Variable selling and administrative (95,000 × \$5)	475,000
Fixed selling and administrative (80,000 × \$2)	<u>160,000</u>
Total costs	<u>\$4,515,000</u>

B.

The variable selling and administrative costs are constant at \$5 per unit. Thus, the graph is a straight, horizontal line.

C.

1. Fixed
2. Variable
3. Variable

**References**

**Essay**

Learning Objective:  
02-07 Understand  
the importance of  
identifying an  
organization's cost  
drivers.

**Difficulty: 3 Hard**

Learning Objective:  
02-08 Describe the  
behavior of variable  
and fixed costs, in  
total and on a per-  
unit basis.

141. Award: 1.00 point

Sebastian Muffler, Inc. operates an automobile service facility. The table below shows the cost incurred during a month when 500 mufflers were replaced.

	Number of Muffler Replacements		
	400	500	600
Total costs:			
Fixed costs	A	\$9,000	C
Variable costs	B	6,000	D
Total costs	E	\$15,000	F
Cost per muffler replacement:			
Fixed cost	G	H	I
Variable cost	J	K	L
Total cost per muffler replacement	M	N	O

**Required:**

Fill in the missing amounts, labeled A through O, in the table above.

	Number of Muffler Replacements		
	400	500	600
Total costs:			
Fixed costs	\$9,000	\$9,000	\$9,000
Variable costs	4,800	6,000	7,200
Total costs	\$13,800	\$15,000	\$16,200
Cost per muffler replacement:			
Fixed cost	\$22.50	\$18.00	\$15.00
Variable cost	12.00	12.00	12.00
Total cost per muffler replacement	\$34.50	\$30.00	\$27.00

*Explanatory notes:*

A and C each equal \$9,000, since fixed costs do not vary with activity.

J, K, and L each equal \$12 ( $\$6,000 \div 500$ ), since variable cost per replacement remains constant.

B equals \$4,800 ( $400 \times \$12$ )

D equals \$7,200 ( $600 \times \$12$ )

G equals \$22.50 ( $\$9,000 \div 400$ )

H equals \$18.00 ( $\$9,000 \div 500$ )

I equals \$15.00 ( $\$9,000 \div 600$ )

**References**

Essay

Difficulty: 3 Hard

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

## 142. Award: 1.00 point

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In discussing the operation of her automobile, Dr. Lawson once observed that gasoline is a fixed cost because the cost per gallon is relatively stable. Insurance, on the other hand, is a variable cost because the cost per mile varies inversely with the number of miles driven. Comment on the Dr. Lawson's observation.

Dr. Lawson's observations are incorrect, as gasoline is a variable cost and insurance is a fixed cost. Gasoline cost will increase with the number of miles driven, whereas insurance outlays will remain the same. The doctor seems to have confused the "total" perspective, as defined by accountants, with the notion of per-unit cost behavior.

### References

**Essay**

Difficulty: 3 Hard

Learning Objective: 02-08 Describe the behavior of variable and fixed costs, in total and on a per-unit basis.

# 143. Award: 1.00 point

The following terms are used to describe various economic characteristics of costs:

Opportunity cost	Differential cost
Out-of-pocket cost	Marginal cost
Sunk cost	Average cost

**Required:**

Choose one of the preceding terms to characterize each of the amounts described below. Each term may be used only once.

- A. The cost of including one extra child in a day-care center.
- B. The cost of merchandise inventory purchased five years ago. The goods are now obsolete.
- C. The cost of feeding 300 children in a public school cafeteria is \$450 per day, or \$1.50 per child per day. What economic term describes this \$1.50 cost?
- D. The management of a high-rise office building uses 3,000 square feet of space in the building for its own administrative functions. This space could be rented for \$30,000. What economic term describes this \$30,000 of lost rental revenue?
- E. The cost of building an automated assembly line in a factory is \$700,000; a manually operated assembly line would cost \$250,000. What economic term is used to describe the \$450,000 variation between these two amounts?
- F. Refer to the preceding question and assume that the firm is currently building the assembly line for \$700,000. What economic term is used to describe the \$700,000 construction cost?

- A. Marginal cost
- B. Sunk cost
- C. Average cost
- D. Opportunity cost
- E. Differential cost
- F. Out-of-pocket cost

**References**

Essay

Difficulty: 3 Hard

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.



## 144. Award: 1.00 point

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Describe the economic characteristics of sunk costs and opportunity costs, and explain the impact that these costs may have on decisions.

Sunk costs have already been incurred. They are part of history and cannot be altered. Therefore, sunk costs are not relevant for any current or future management decision. Opportunity costs, in contrast, are relevant for current and future decisions. Such costs are defined as the net benefits from a decision alternative that was not selected—that is, the benefits were sacrificed to pursue another option.

### References

#### Essay

Difficulty: 2 Medium

Learning Objective: 02-10 Define and give examples of an opportunity cost, an out-of-pocket cost, a sunk cost, a differential cost, a marginal cost, and an average cost.