CHAPTER 2 AN INTRODUCTION TO COST TERMS AND PURPOSES

TRUE/FALSE

1. Products, services, departments, and customers may be cost objects.

Answer:TrueDifficulty:1Objective:1Terms to Learn:cost object

2. Costs are accounted for in two basic stages: assignment followed by accumulation.

Answer:FalseDifficulty:1Objective:1Terms to Learn:cost accumulationCosts are accounted for in two basic stages:accumulation followed by assignment.

3. Actual costs and budgeted costs are two different terms referring to the same thing.

Answer:FalseDifficulty:1Objective:1Terms to Learn:budgeted costsBudgeted costs are what are planned before the beginning of the accounting period,while actual costs are those costs compiled at the end of the accounting period.

4. Accountants define a cost as a resource to be sacrificed to achieve a specific objective.

| Answer: | True | Difficulty: | 1 | Objective: | 1 |
|-----------------|------|-------------|---|------------|---|
| Terms to Learn: | cost | | | | |

5. A cost object is always either a product or a service.

Answer:FalseDifficulty:2Objective:1Terms to Learn:cost objectA cost object could be anything management wishes to determine the cost of, for
example, a department.

6. A department could be considered a cost object.

Answer:TrueDifficulty:2Objective:1Terms to Learn:cost object

7. The same cost may be direct for one cost object and indirect for another cost object.

Answer:TrueDifficulty:3Objective:2Terms to Learn:cost object

8. Assigning direct costs poses more problems than assigning indirect costs.

Answer:FalseDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost objectTracing direct costs is quite straightforward, whereas assigning indirect costs to a number of different cost objects can be very challenging.Difficulty:2

9. Improvements in information-gathering technologies are making it possible to trace more costs as direct.

Answer:TrueDifficulty:2Objective:2Terms to Learn:direct costs of a cost object

10. Misallocated indirect costs may lead to promoting products that are not profitable.

Answer:TrueDifficulty:2Objective:2Terms to Learn:cost allocation

11. The materiality of the cost is a factor in classifying the cost as a direct or indirect cost.

Answer: True *Difficulty*: 2 *Objective*: 2 *Terms to Learn:* direct costs of a cost object, indirect costs of a cost object

12. The cost of a customized machine only used in the production of a single product would be classified as a direct cost.

Answer:TrueDifficulty:1Objective:2Terms to Learn:direct costs of a cost object

13. Some fixed costs may be classified as direct manufacturing costs.

Answer:TrueDifficulty:1Objective:2Terms to Learn:fixed costs, direct costs of a cost object

14. The distinction between direct and indirect costs is clearly set forth in Generally Accepted Accounting Principles (GAAP).

Answer:FalseDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost objectA cost object could be anything management wishes to determine the cost of, forexample.

15. Fixed costs have no cost driver in the short run, but may have a cost driver in the long run.

Answer: True Difficulty: 2 Objective: 3

Terms to Learn: cost driver

16. Costs that are difficult to change over the short run are always variable over the long run.

Answer: True Difficulty: 2 Objective: 3 Terms to Learn: variable cost

17. A decision maker cannot adjust capacity over the short run.

Answer:TrueDifficulty:1Objective:3Terms to Learn:fixed cost

18. Fixed costs vary with the level of production or sales volume.

Answer:FalseDifficulty:1Objective:3Terms to Learn:fixed costVariable costs vary with the level of production or sales volume.

19. Currently, most administrative personnel costs would be classified as fixed costs.

Answer:TrueDifficulty:1Objective:3Terms to Learn:fixed cost

20. Fixed costs depend on the resources used, not the resources acquired.

Answer:FalseDifficulty:2Objective:3Terms to Learn:fixed costFixed costs depend on the resources acquired, and not whether the resources are used or not.

21. The variable cost per unit of a product should stay the same throughout the relevant range of production.

Answer:TrueDifficulty:2Objective:3Terms to Learn:variable cost, relevant range

- 22. An appropriate cost driver for shipping costs might be the number of units shipped.
 Answer: True Difficulty: 2 Objective: 3 Terms to Learn: cost driver
- 23. When making decisions using fixed costs, the focus should be on total costs and not unit costs.

Answer: True Difficulty: 2 Objective: 4

Terms to Learn: fixed cost

24. When 50,000 units are produced the fixed cost is \$10 per unit. Therefore, when 100,000 units are produced fixed costs will remain at \$10 per unit.

Answer:FalseDifficulty:3Objective:4Terms to Learn:fixed cost, unit costWhen 100,000 units are produced fixed costs will decrease to \$5 per unit.

25. Unit costs and average costs are really the same thing.

Answer:TrueDifficulty:2Objective:4Terms to Learn:average cost, unit cost

26. Service-sector companies provide services or intangible products to their customers.

Answer:TrueDifficulty:1Objective:5Terms to Learn:service-sector companies

27. America on Line (AOL) would be an example of a merchandising company.

Answer:FalseDifficulty:2Objective:5Terms to Learn:service-sector companies, merchandising-sector companiesAmerica on Line (AOL) would be an example of a service-sector company.

28. Merchandising companies purchase products and sell them to customers without changing their basic form.

Answer:TrueDifficulty:2Objective:6Terms to Learn:merchandising-sector companies

29. Merchandising companies only hold two types of inventories: merchandise inventory, and direct material.

Answer:FalseDifficulty:2Objective:6Terms to Learn:merchandising-sector companiesMerchandising companies normally hold only one type of inventory:merchandiseinventory.

30. Manufacturing sector firms normally hold three types of inventory: direct materials inventory, work-in-process inventory, and finished goods inventory.

Answer:TrueDifficulty:2Objective:6Terms to Learn:merchandising-sector companies

31. Inventoriable costs are reported as an asset when incurred and expensed on the income statement when the product is sold.

Answer:TrueDifficulty:2Objective:7Terms to Learn:inventoriable costs

32. Cost of goods sold refers to the products brought to completion, whether they were started before or during the current accounting period.

Answer:FalseDifficulty:1Objective:7Terms to Learn:finished-goods inventory, cost of goods manufacturedCost of goods manufactured refers to the products brought to completion, whetherthey were started before or during the current accounting period.

33. Operating income is sales revenue minus cost of goods manufactured.

Answer:FalseDifficulty:1Objective:7Terms to Learn:operating incomeOperating income = sales revenue - cost of goods sold - operating expenses

34. All manufacturing costs are inventoriable costs.

Answer:TrueDifficulty:2Objective:7Terms to Learn:inventoriable costs

35. All costs reported on the income statement of a service-sector company are period costs.

Answer:TrueDifficulty:1Objective:7Terms to Learn:period costs

36. Period costs are never included as part of inventory.

Answer:TrueDifficulty:1Objective:7Terms to Learn:period costs

37. Conversion costs include all direct manufacturing costs.

Answer:FalseDifficulty:1Objective:7Terms to Learn:conversion costsPrime costs include all direct manufacturing costs.

38. Inventory of a manufacturing firm includes goods partially worked on but not yet fully completed.

Answer:TrueDifficulty:1Objective:7Terms to Learn:work-in-process inventory

39. The wages of a plant supervisor would be classified as a period cost.

Answer:FalseDifficulty:2Objective:7Terms to Learn:period costsThe wages of a plant supervisor would be classified as a product cost.

40. For external reporting, GAAP requires that costs be classified as either variable or fixed.

Answer:FalseDifficulty:2Objective:7Terms to Learn:fixed cost, variable costFor external reporting, GAAP requires that costs be classified as either product orperiod costs.

41. Depreciation can be classified as either an inventoriable cost or a period cost, depending on what is being depreciated.

Answer:TrueDifficulty:2Objective:7Terms to Learn:inventoriable cost, period cost

42. Insurance on a factory can be classified as a period cost.

Answer:FalseDifficulty:2Objective:7Terms to Learn:inventoriable cost, period costInsurance on a factory is classified as a product cost.7

43. Overtime premium consists of the wages paid to all workers (for both direct labor and indirect labor) in excess of their straight-time wage rates.

Answer:TrueDifficulty:1Objective:8Terms to Learn:overtime premium

44. A product cost that is useful for one decision may not be useful information for another decision.

Answer:TrueDifficulty:2Objective:8Terms to Learn:product cost

45. For external reporting purposes, indirect manufacturing costs must be allocated to individual units.

Answer:TrueDifficulty:2Objective:8Terms to Learn:indirect manufacturing costs, cost allocation

46. Overtime premium is normally considered as a component of direct labor.

Answer:FalseDifficulty:2Objective:8Terms to Learn:direct manufacturing labor costs, overtime premiumOvertime premium is normally considered as part of indirect labor since it is usually
not associated with a particular job.

47. If a worker is paid for 8 hours, but is idle for 1 of those 8 hours, the 1 hour of idle time would be considered a component of direct labor.

Answer:FalseDifficulty:2Objective:8Terms to Learn:direct manufacturing labor costs, overtime premiumIdle time is normally considered a component of indirect labor since it is usually notassociated with a particular job.

48. The role of the cost accountant is to tailor the cost calculation to fit the current decision situation.

Answer:TrueDifficulty:1Objective:9Terms to Learn:cost

49. Cost accounting and cost management include calculating various costs, obtaining financial and nonfinancial information, and analyzing relevant information for decision making.

Answer:TrueDifficulty:1Objective:9Terms to Learn:cost, variable cost

50. A costing system traces direct costs and allocates indirect costs to products.

Answer:TrueDifficulty:2Objective:9Terms to Learn:cost tracing, cost allocation

51. Management accountants help managers identify which information is relevant to a particular decision.

| Answer: | True | Difficulty: | 1 | Objective: | 9 |
|-----------------|------|-------------|---|------------|---|
| Terms to Learn: | cost | | | | |

MULTIPLE CHOICE

52. Cost objects include:

a. products

53.

- b. customers
- departments c.
- d. All of these answers are correct.

| | wer: ms to Learn: | d cost object | Difficulty: | 2 | Objective: | 1 |
|-----|----------------------|------------------|-------------|---|------------|---|
| Act | ual costs are: | | | | | |
| a. | the costs in | curred | | | | |
| b. | budgeted c | osts | | | | |

- budgeted costs
- estimated costs с. forecasted costs d.

Answer:

а

Objective: 1

Terms to Learn: actual cost

54. The general term used to identify both the tracing and the allocation of accumulated costs to a cost object is:

Difficulty: 1

- cost accumulation a.
- cost assignment b.
- cost tracing c.
- d. conversion costing

Difficulty: 1 *Objective*: 1 Answer: b Terms to Learn: cost assignment

- 55. The collection of accounting data in some organized way is:
 - cost accumulation a.
 - b. cost assignment
 - cost tracing c.
 - conversion costing d.

Difficulty: 1 *Objective*: 1 Answer: a Terms to Learn: cost accumulation

- 56. Budgeted costs are:
 - a. the costs incurred this year
 - b. the costs incurred last year
 - c. planned or forecasted costs
 - d. competitor's costs

Answer:cDifficulty:2Objective:1Terms to Learn:budgeted costs

- 57. Cost assignment is:
 - a. always arbitrary
 - b. includes tracing and allocating
 - c. the same as cost accumulation
 - d. finding the difference between budgeted and actual costs

Answer:bDifficulty:2Objective:1Terms to Learn:cost assignment

- 58. Which of the following does NOT affect the direct/indirect classification of a cost?a. the level of budgeted profit for the next year
 - b. the materiality of the cost in question
 - c. available technology to gather information about the cost
 - d. the design of the operation

Answer:aDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost object

- 59. Which of the following statements about the direct/indirect cost classification is NOT true?
 - a. Direct costs are always traced.
 - b. Direct costs are always allocated.
 - c. The design of operations affects the direct/indirect classification.

d. The direct/indirect classification depends on the choice of cost object.

Answer:bDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost object

- 60. Cost tracing is:
 - a. the assignment of direct costs to the chosen cost object
 - b. a function of cost allocation
 - c. the process of tracking both direct and indirect costs associated with a cost object
 - d. the process of determining the actual cost of the cost object

| Answer: | a | Difficulty: | 2 | Objective: | 2 |
|-----------------|--------------|-------------|---|------------|---|
| Terms to Learn: | cost tracing | | | | |

- 61. Cost allocation is:
 - a. the process of tracking both direct and indirect costs associated with a cost object
 - b. the process of determining the actual cost of the cost object
 - c. the assignment of indirect costs to the chosen cost object
 - d. a function of cost tracing

Answer:cDifficulty:2Objective:2Terms to Learn:cost allocation

- 62. The determination of a cost as either direct or indirect depends upon the:
 - a. accounting system
 - b. allocation system
 - c. cost tracing system
 - d. cost object chosen

Answer:dDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost object

- 63. Classifying a cost as either direct or indirect depends upon:
 - a. the behavior of the cost in response to volume changes
 - b. whether the cost is expensed in the period in which it is incurred
 - c. whether the cost can be easily identified with the cost object
 - d. whether an expenditure is avoidable or not in the future

Answer:cDifficulty:2Objective:2Terms to Learn:direct costs of a cost object, indirect costs of a cost object

- 64. A manufacturing plant produces two product lines: football equipment and hockey equipment. Direct costs for the football equipment line are the:
 - a. beverages provided daily in the plant break room
 - b. monthly lease payments for a specialized piece of equipment needed to manufacture the football helmet
 - c. salaries of the clerical staff that work in the company administrative offices
 - d. utilities paid for the manufacturing plant

Answer:bDifficulty:2Objective:2Terms to Learn:direct costs of a cost object

65. A manufacturing plant produces two product lines: football equipment and hockey equipment. An indirect cost for the hockey equipment line is the:

a. material used to make the hockey sticks

- b. labor to bind the shaft to the blade of the hockey stick
- c. shift supervisor for the hockey line
- d. plant supervisor

| Answer: | d | Difficulty: | 2 | Objective: | 2 |
|-----------------|----------------|----------------|-----|------------|---|
| Terms to Learn: | indirect costs | of a cost obje | ect | | |

- 66. Which one of the following items is a direct cost?
 - a. Customer-service costs of a multiproduct firm; Product A is the cost object.
 - b. Printing costs incurred for payroll check processing; payroll check processing is the cost object.
 - c. The salary of a maintenance supervisor in a multiproduct manufacturing plant; Product B is the cost object.
 - d. Utility costs of the administrative offices; the accounting department is the cost object.

Answer:bDifficulty:2Objective:2Terms to Learn:direct costs of a cost object

- 67. Indirect manufacturing costs:
 - a. can be traced to the product that created the costs
 - b. can be easily identified with the cost object
 - c. generally include the cost of material and the cost of labor
 - d. may include both variable and fixed costs

| Answer: | d | Difficulty: | 2 | Objective: | 2 |
|-----------------|--------------|----------------|-----|------------|---|
| Terms to Learn: | indirect man | ufacturing cos | sts | | |

- 68. All of the following are true EXCEPT that indirect costs:
 - a. may be included in prime costs
 - b. are not easily traced to products or services
 - c. vary with the selection of the cost object
 - d. may be included in manufacturing overhead

| Answer: | a | Difficulty: | 2 | Objective: | 2 |
|-----------------|-------------|------------------|-----|------------|---|
| Terms to Learn: | indirect ma | unufacturing cos | sts | | |

- 69. Which statement is TRUE?
 - a. All variable costs are direct costs.
 - b. Because of a cost-benefit tradeoff, some direct costs may be treated as indirect costs.
 - c. All fixed costs are indirect costs.
 - d. All direct costs are variable costs.

Answer:bDifficulty:3Objective:3Terms to Learn:variable costs, fixed costs, indirect costs of a cost object

- 70. Cost behavior refers to:
 - a. how costs react to a change in the level of activity
 - b. whether a cost is incurred in a manufacturing, merchandising, or service company
 - c. classifying costs as either inventoriable or period costs
 - d. whether a particular expense has been ethically incurred

Answer:aDifficulty:2Objective:3Terms to Learn:fixed cost, variable cost

- 71. An understanding of the underlying behavior of costs helps in all of the following EXCEPT:
 - a. costs can be better estimated as volume expands and contracts
 - b. true costs can be better evaluated
 - c. process inefficiencies can be better identified and as a result improved
 - d. sales volume can be better estimated

| Answer: | d | Difficulty: | 2 | Objective: | 3 |
|-----------------|-------------|---------------|---|------------|---|
| Terms to Learn: | fixed cost, | variable cost | | | |

- 72. At a plant where a union agreement sets annual salaries and conditions, annual labor costs usually:
 - a. are considered a variable cost
 - b. are considered a fixed cost
 - c. depend on the scheduling of floor workers
 - d. depend on the scheduling of production runs

| Answer: | b | Difficulty: | 2 | Objective: | 3 |
|-----------------|------------|-------------|---|------------|---|
| Terms to Learn: | fixed cost | | | | |

- 73. Variable costs:
 - a. are always indirect costs
 - b. increase in total when the actual level of activity increases
 - c. include most personnel costs and depreciation on machinery
 - d. can always be traced directly to the cost object

| Answer: | b | Difficulty: | 2 | Objective: | 3 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | variable cost | | | | |

- 74. Fixed costs:
 - a. may include either direct or indirect costs
 - b. vary with production or sales volumes
 - c. include parts and materials used to manufacture a product
 - d. can be adjusted in the short run to meet actual demands

Answer:aDifficulty:2Objective:3Terms to Learn:fixed cost

- 75. Fixed costs depend on the:
 - a. amount of resources used
 - b. amount of resources acquired
 - c. volume of production
 - d. volume of sales

| Answer: | b | Difficulty: | 3 | Objective: | 3 |
|-----------------|------------|-------------|---|------------|---|
| Terms to Learn: | fixed cost | | | | |

76. Which one of the following is a variable cost for an insurance company?

- a. rent
- b. president's salary
- c. sales commissions
- d. property taxes

| Answer: | с | Difficulty: | 1 | Objective: | 3 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | variable cost | | | | |

- 77. Which of the following is a fixed cost for an automobile manufacturing plant? a. administrative salaries
 - b. electricity used by assembly-line machines
 - c. sales commissions
 - d. windows for each car produced

| Answer: | а | Difficulty: | 2 | Objective: | 3 |
|-----------------|------------|-------------|---|------------|---|
| Terms to Learn: | fixed cost | | | | |

- 78. If each furnace requires a hose that costs \$20 and 2,000 furnaces are produced for the month, the total cost for hoses is:
 - a. considered to be a direct fixed cost
 - b. considered to be a direct variable cost
 - c. considered to be an indirect fixed cost
 - d. considered to be an indirect variable cost

| Answer: | b | Difficulty: | 3 | Objective: | 3 |
|-----------------|--------------|-----------------|------------------|------------|---|
| Terms to Learn: | direct costs | of a cost objec | t, variable cost | | |

79. The MOST likely cost driver of distribution costs is the:

- a. number of parts within the product
- b. number of miles driven
- c. number of products manufactured
- d. number of production hours

Answer: b Difficulty: 2 Objective: 3 Terms to Learn: cost driver

80. The MOST likely cost driver of direct material costs is the:

- a. number of parts within the product
- b. number of miles driven
- c. number of products manufactured
- d. number of production hours

Answer:cDifficulty:2Objective:3Terms to Learn:cost driver

- 81. Which of the following statements is FALSE?
 - a. There is a cause-and-effect relationship between the cost driver and the level of activity.
 - b. Fixed costs have cost drivers over the short run.
 - c. Over the long run all costs have cost drivers.
 - d. Volume of production is a cost driver of direct manufacturing costs.

Answer:bDifficulty:2Objective:3Terms to Learn:cost driver

- 82. A band of normal activity or volume in which specific cost-volume relationships are maintained is referred to as the:
 - a. average range
 - b. cost-allocation range
 - c. cost driver range
 - d. relevant range

Answer:dDifficulty:1Objective:3Terms to Learn:relevant range

- 83. Within the relevant range, if there is a change in the level of the cost driver, then a. total fixed costs and total variable costs will change
 - b. total fixed costs and total variable costs will remain the same
 - c. total fixed costs will remain the same and total variable costs will change

d. total fixed costs will change and total variable costs will remain the same

Answer:cDifficulty:2Objective:3Terms to Learn:fixed cost, variable cost

- 84. Within the relevant range, if there is a change in the level of the cost driver, then
 - a. fixed and variable costs per unit will change
 - b. fixed and variable costs per unit will remain the same
 - c. fixed costs per unit will remain the same and variable costs per unit will change
 - d. fixed costs per unit will change and variable costs per unit will remain the same

Answer:dDifficulty:2Objective:3Terms to Learn:relevant range

- 85. Which of the following would be LEAST likely to be a cost driver for a company's accounting costs?
 - a. the number of employees in the accounting department
 - b. the number of invoices processed
 - c. the number of units sold
 - d. the square footage of the office space used by the accounting department

| Answer: | c | Difficulty: | 2 | Objective: | 3 |
|-----------------|-------------|-------------|---|------------|---|
| Terms to Learn: | cost driver | | | | |

- 86. When 10,000 units are produced, fixed costs are \$14 per unit. Therefore, when 20,000 units are produced fixed costs will:
 - a. increase to \$28 per unit
 - b. remain at \$14 per unit
 - c. decrease to \$7 per unit
 - d. total \$280,000

Answer:cDifficulty:3Objective:4Terms to Learn:fixed cost

- 87. When 10,000 units are produced, variable costs are \$6 per unit. Therefore, when 20,000 units are produced:
 - a. variable costs will total \$120,000
 - b. variable costs will total \$60,000
 - c. variable unit costs will increase to \$12 per unit
 - d. variable unit costs will decrease to \$3 per unit

Answer:aDifficulty:3Objective:4Terms to Learn:variable cost

88. Christi Manufacturing provided the following information for last month:

| \$10,000 |
|----------------|
| p10,000 |
| 3,000 |
| 5,000 |
| <u>\$2,000</u> |
| |

If sales double next month, what is the projected operating income?

- a. \$4,000
- b. \$7,000
- c. \$9,000
- d. \$12,000

 Answer:
 c
 Difficulty:
 3
 Objective:
 4

 $(\$10,000 \ge 2) - (\$3,000 \ge 2) - \$5,000 = \$9,000$ Terms to Learn:
 fixed cost, variable cost

89. Kym Manufacturing provided the following information for last month:

| Sales | \$12,000 |
|------------------|----------------|
| Variable costs | 4,000 |
| Fixed costs | <u>1,000</u> |
| Operating income | <u>\$7,000</u> |

If sales double next month, what is the projected operating income?

- a. \$14,000
- b. \$15,000
- c. \$18,000
- d. \$19,000

 Answer:
 b
 Difficulty:
 3
 Objective:
 4

 $(\$12,000 \ge 2) - (\$4,000 \ge 2) - \$1,000 = \$15,000$ Terms to Learn:
 fixed cost, variable cost

2-16

90. Wheel and Tire Manufacturing currently produces 1,000 tires per month. The following per unit data apply for sales to regular customers:

| Direct materials | \$20 |
|---------------------------------|-------------|
| Direct manufacturing labor | 3 |
| Variable manufacturing overhead | 6 |
| Fixed manufacturing overhead | <u>10</u> |
| Total manufacturing costs | <u>\$39</u> |

The plant has capacity for 3,000 tires and is considering expanding production to 2,000 tires. What is the total cost of producing 2,000 tires?

a. \$39,000

- b. \$78,000
- c. \$68,000
- d. \$62,000

Answer: c Difficulty: 2 Objective: 4 $[(\$20 + \$3 + \$6) \ge 2,000 \text{ units}] + (\$10 \ge 1,000 \text{ units}) = \$68,000$ Terms to Learn: fixed cost, variable cost

- 91. XIAN Manufacturing produces a unique valve, and has the capacity to produce 50,000 valves annually. Currently XIAN produces 40,000 valves and is thinking about increasing production to 45,000 valves next year. What is the most likely behavior of total manufacturing costs and unit manufacturing costs given this change?
 - a. Total manufacturing costs will increase and unit manufacturing costs will stay the same.
 - b. Total manufacturing costs will increase and unit manufacturing costs will decrease.
 - c. Total manufacturing costs will stay the same and unit manufacturing costs will stay the same.
 - d. Total manufacturing costs will stay the same and unit manufacturing costs will decrease.

| Answer: | b | Difficulty: | 3 | Objective: | 4 |
|-----------------|-------------|---------------|---|------------|---|
| Terms to Learn: | fixed cost, | variable cost | | | |

92. Tire and Spoke Manufacturing currently produces 1,000 bicycles per month. The following per unit data apply for sales to regular customers:

| Direct materials | \$50 |
|---------------------------------|-------------|
| Direct manufacturing labor | 5 |
| Variable manufacturing overhead | 14 |
| Fixed manufacturing overhead | <u>10</u> |
| Total manufacturing costs | <u>\$79</u> |

The plant has capacity for 3,000 bicycles and is considering expanding production to 2,000 bicycles. What is the per unit cost of producing 2,000 bicycles?

- a. \$79 per unit
- b. \$158 per unit
- c. \$74 per unit
- d. \$134 per unit

```
Answer: c Difficulty: 3 Objective: 4
[($50 + $5 + $14) x 2,000 units] + ($10 x 1,000 units) = $148,000 / 2,000 units = $74
Terms to Learn: unit cost
```

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 93 AND 94: Axle and Wheel Manufacturing currently produces 1,000 axles per month. The following per unit data apply for sales to regular customers:

| Direct materials | \$30 |
|---------------------------------|-------------|
| Direct manufacturing labor | 5 |
| Variable manufacturing overhead | 10 |
| Fixed manufacturing overhead | <u>40</u> |
| Total manufacturing costs | <u>\$85</u> |

- 93 The plant has capacity for 2,000 axles and is considering expanding production to 1,500 axles. What is the total cost of producing 1,500 axles?
 - a. \$85,000
 - b. \$170,000
 - c. \$107,500
 - d. \$102,500

Answer:cDifficulty:2Objective:4 $[(\$30 + \$5 + \$10) \ge 1,500 \ units] + (\$40 \ge 1,000 \ units) = \$107,500$ Terms to Learn:fixed cost, variable cost

94. What is the per unit cost when producing 1,500 axles?

- a. \$71.67
- b. \$107.50
- c. \$85.00
- d. \$170.00

 Answer:
 a
 Difficulty:
 2
 Objective:
 4

 \$107,500 / 1,500 = \$71.67
 Terms to Learn:
 unit cost

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 95 THROUGH 97: Pederson Company reported the following:

| Manufacturing costs | \$2,000,000 |
|---------------------|-------------------------------------|
| Units manufactured | 50,000 |
| Units sold | 47,000 units sold for \$75 per unit |
| Beginning inventory | 0 units |

Objective: 4

- 95. What is the average manufacturing cost per unit?
 - a. \$40.00
 - b. \$42.55
 - c. \$0.025
 - d. \$75.00

96. What is the amount of ending finished goods inventory?

- a. \$1,880,000
- b. \$120,000
- c. \$225,000
- d. \$105,000

 Answer:
 b
 Difficulty:
 2
 Objective:
 4

 (50,000 - 47,000) x (\$2,000,000 / \$50,000) = \$120,000
 Terms to Learn:
 Finished-goods inventory
 Terms to Learn:

- 97. What is the amount of gross margin?
 - a. \$1,750,000
 - b. \$3,525,000
 - c. \$5,405,000
 - d. \$1,645,000

Answer:dDifficulty:3Objective:7 $47,000 \ge (\$75 - (\$2,000,000 / \$50,000)) = \$1,645,000$ Terms to Learn:manufacturing-sector companies

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 98 THROUGH 100: The following information pertains to Alleigh's Mannequins:

| Manufacturing costs | \$1,500,000 |
|---------------------|-------------------------------------|
| Units manufactured | 30,000 |
| Units sold | 29,500 units sold for \$85 per unit |
| Beginning inventory | 0 units |

Objective: 4

98. What is the average manufacturing cost per unit?

- b. \$50.85
- c. \$17.65
- d. \$85.00

Answer: a Difficulty: 1 \$1,500,000 / 30,000 = \$50.00 Terms to Learn: unit cost

99. What is the amount of ending finished goods inventory?

- a. \$42,500
- b. \$25,424
- c. \$25,000
- d. \$1,475,000

 Answer:
 c
 Difficulty:
 2
 Objective:
 4

 $(30,000 - 29,500) \times (\$1,500,000 / \$30,000) = \$25,000$ Terms to Learn:
 finished-goods inventory
 0

100. What is the amount of gross margin?

| a. | \$1,475,000 |
|----|-------------|
| | +-,, |

- b. \$1,500,000
- c. \$2,507,500
- d. \$1,032,500

 Answer:
 d
 Difficulty:
 3
 Objective:
 7

 $29,500 \ge (\$85 - (\$1,500,000 / \$30,000)) = \$1,032,500$ Terms to Learn:
 manufacturing-sector company
 Terms to Learn:
 manufacturing-sector company

- 101. Which of the following companies is part of the service sector of our economy?
 - a. Wal-Mart
 - b. Bank of America
 - c. General Motors
 - d. Amazon.com

Answer:bDifficulty:1Objective:5Terms to Learn:service-sector companies

- 102. Which of the following companies is part of the merchandising sector of our economy?
 - a. General Motors
 - b. Intel
 - c. The GAP
 - d. Robert Meyer Accounting Firm

Answer:cDifficulty:1Objective:5Terms to Learn:merchandising-sector companies

- 103. Which of the following companies is part of the manufacturing sector of our economy?
 - a. Nike
 - b. Barnes & Noble
 - c. Corvette Law Firm
 - d. Sears, Roebuck, and Company

Answer:aDifficulty:1Objective:5Terms to Learn:manufacturing-sector companies

- 104. Google, an internet search firm, would be classified as:
 - a. a manufacturing-sector company
 - b. a merchandising-sector company
 - c. a service sector company
 - d. None of these answers are correct.

| Answer: | С | Difficulty: | 2 | Objective: | 5 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | service-secto | r companies | | | |

105. Service-sector companies report:

- a. only merchandise inventory
- b. only finished goods inventory
- c. direct materials inventory, work-in-process inventory, and finished goods inventory accounts
- d. no inventory accounts

| Answer: | d | Difficulty: | 1 | Objective: | 6 |
|-----------------|----------------|-------------|---|------------|---|
| Terms to Learn: | service-sector | companies | | | |

106. Manufacturing-sector companies report:

- a. only merchandise inventory
- b. only finished goods inventory
- c. direct materials inventory, work-in-process inventory, and finished goods inventory accounts
- d. no inventory accounts

Answer:cDifficulty:1Objective:6Terms to Learn:manufacturing-sector companies

107. For a manufacturing company, direct material costs may be included in:

- a. direct materials inventory only
- b. merchandise inventory only
- c. both work-in-process inventory and finished goods inventory
- d. direct materials inventory, work-in-process inventory, and finished goods inventory accounts

Answer:dDifficulty:3Objective:6Terms to Learn:manufacturing-sector companies, direct material costs

108. For a manufacturing company, direct labor costs may be included in:

- a. direct materials inventory only
- b. merchandise inventory only
- c. both work-in-process inventory and finished goods inventory
- d. direct materials inventory, work-in-process inventory, and finished goods inventory accounts

Answer: c *Difficulty*: 3 *Objective*: 6 *Terms to Learn*: manufacturing sector companies, direct manufacturing labor costs

109. For a manufacturing company, indirect manufacturing costs may be included in:

- a. direct materials inventory only
- b. merchandise inventory only
- c. both work-in-process inventory and finished goods inventory
- d. direct materials inventory, work-in-process inventory, and finished goods inventory accounts

Answer:cDifficulty:3Objective:6Terms to Learn:indirect manufacturing costs

- 110. For a manufacturing-sector company, the cost of factory insurance is classified as a:
 - a. direct material cost
 - b. direct manufacturing labor cost
 - c. manufacturing overhead cost
 - d. period cost

Answer:cDifficulty:1Objective:6Terms to Learn:period costs

111. For a printing company, the cost of paper is classified as a:

- a. direct material cost
- b. direct manufacturing labor cost
- c. manufacturing overhead cost
- d. period cost

Answer:aDifficulty:1Objective:6Terms to Learn:direct material costs

- 112. Wages paid to machine operators on an assembly line are classified as a:
 - a. direct material cost
 - b. direct manufacturing labor cost
 - c. manufacturing overhead cost
 - d. period cost

Answer:bDifficulty:1Objective:6Terms to Learn:direct manufacturing labor costs

- 113. Manufacturing overhead costs in an automobile manufacturing plant MOST likely include:
 - a. labor costs of the painting department
 - b. indirect material costs such as lubricants
 - c. sales commissions
 - d. steering wheel costs

Answer:bDifficulty:1Objective:6Terms to Learn:manufacturing overhead costs

- 114. Manufacturing overhead costs are also referred to as:
 - a. indirect manufacturing costs
 - b. prime costs
 - c. period costs
 - d. direct material

| Answer: | a | Difficulty: | 1 | Objective: | 6 |
|-----------------|---------------|---------------|------|------------|---|
| Terms to Learn: | manufacturing | g overhead co | osts | | |

115. Merchandising companies normally report:

- a. only merchandise inventory
- b. only finished goods inventory
- c. direct materials inventory, work-in-process inventory, and finished goods inventory accounts
- d. no inventory accounts

| Answer: | a | Difficulty: | 1 | Objective: | 6 |
|-----------------|-------------|---------------|--------|------------|---|
| Terms to Learn: | merchandisi | ng-sector com | panies | | |

- 116. Direct materials inventory would normally include:
 - a. direct materials in stock and awaiting use in the manufacturing process
 - b. goods partially worked on but not yet fully completed
 - c. goods fully completed but not yet sold
 - d. products in their original form intended to be sold without changing their basic form

Answer:aDifficulty:1Objective:6Terms to Learn:direct materials inventory

- 117. Work-in-process inventory would normally include:
 - a. direct materials in stock and awaiting use in the manufacturing process
 - b. goods partially worked on but not yet fully completed
 - c. goods fully completed but not yet sold
 - d. products in their original form intended to be sold without changing their basic form

Answer:bDifficulty:1Objective:6Terms to Learn:work-in-process inventory

118. Finished goods inventory would normally include:

- a. direct materials in stock and awaiting use in the manufacturing process
- b. goods partially worked on but not yet fully completed
- c. goods fully completed but not yet sold
- d. products in their original form intended to be sold without changing their basic form

| Answer: | с | Difficulty: | 1 | Objective: | 6 |
|-----------------|------------|-----------------|---|------------|---|
| Terms to Learn: | finished-g | goods inventory | | | |

- 119. Merchandise inventory would normally include:
 - a. direct materials in stock and awaiting use in the manufacturing process
 - b. goods partially worked on but not yet fully completed
 - c. goods fully completed but not yet sold
 - d. products in their original form intended to be sold without changing their basic form

Answer:dDifficulty:1Objective:6Terms to Learn:merchandising-sector companies

120. The income statement of a manufacturing firm reports:

- a. period costs only
- b. inventoriable costs only
- c. both period and inventoriable costs
- d. period and inventoriable costs but at different times; the reporting varies

| Answer: | с | Difficulty: | 2 | Objective: | 7 |
|-----------------|---------------|---------------|-------|------------|---|
| Terms to Learn: | period costs, | inventoriable | costs | | |

121. The income statement of a service-sector firm reports:

- a. period costs only
- b. inventoriable costs only
- c. both period and inventoriable costs
- d. period and inventoriable costs but at different times; the reporting varies

Answer:aDifficulty:2Objective:7Terms to Learn:service-sector companies, period costs

122. Manufacturing costs include all of the following EXCEPT:

- a. costs incurred inside the factory
- b. both direct and indirect costs
- c. both variable and fixed costs
- d. both inventoriable and period costs

Answer:dDifficulty:2Objective:7Terms to Learn:manufacturing-sector companies

123. Inventoriable costs:

- a. include administrative and marketing costs
- b. are expensed in the accounting period in which the products are sold
- c. are particularly useful in management accounting
- d. are also referred to as nonmanufacturing costs

| Answer: | b | Difficulty: | 2 | Objective: | 7 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | inventoriable | costs | | | |

124. Inventoriable costs are expensed on the income statement:

- a. when direct materials for the product are purchased
- b. after the products are manufactured
- c. when the products are sold
- d. not at any particular time, it varies

Answer:cDifficulty:2Objective:7Terms to Learn:inventoriable costs

- 125. Costs that are initially recorded as assets and expensed when sold are called:
 - a. period costs
 - b. inventoriable costs
 - c. variable costs
 - d. fixed costs

Answer:bDifficulty:2Objective:7Terms to Learn:inventoriable costs

- 126. For merchandising companies, inventoriable costs include:
 - a. the cost of the goods themselves
 - b. incoming freight costs
 - c. insurance costs for the goods
 - d. All of these answers are correct.

Answer:dDifficulty:2Objective:7Terms to Learn:inventoriable costs, merchandising-sector companies

127. For manufacturing firms, inventoriable costs include:

- a. plant supervisor salaries
- b. research and development costs
- c. costs of dealing with customers after the sale
- d. distribution costs

Answer:aDifficulty:2Objective:7Terms to Learn:inventoriable costs, manufacturing-sector companies

- 128. A plant manufactures several different products. The wages of the plant supervisor can be classified as a(n):
 - a. direct cost
 - b. inventoriable cost
 - c. variable cost
 - d. period cost

Answer:bDifficulty:2Objective:7Terms to Learn:inventoriable cost

- 129. The cost of inventory reported on the balance sheet may include all of the following EXCEPT:
 - a. customer-service costs
 - b. wages of the plant supervisor
 - c. depreciation of the factory equipment
 - d. the cost of parts used in the manufacturing process

Answer:aDifficulty:2Objective:7Terms to Learn:inventoriable costs, period costs

- 130. For a computer manufacturer, period costs include the cost of:
 - a. the keyboard
 - b. labor used for assembly and packaging
 - c. distribution
 - d. assembly-line equipment

Answer:cDifficulty:1Objective:7Terms to Learn:period costs, manufacturing-sector company

131. Period costs:

- a. include only fixed costs
- b. seldom influence financial success or failure
- c. include the cost of selling, delivering, and after-sales support for customers
- d. should be treated as an indirect cost rather than as a direct manufacturing cost

| Answer: | с | Difficulty: | 2 | Objective: | 7 |
|-----------------|--------------|-------------|---|------------|---|
| Terms to Learn: | period costs | | | | |

132. Period costs:

- a. are treated as expenses in the period they are incurred
- b. are directly traceable to products
- c. include direct labor
- d. are also referred to as manufacturing overhead costs

Answer:aDifficulty:2Objective:7Terms to Learn:period costs

133. Which of the following is NOT a period cost?

- a. marketing costs
- b. general and administrative costs
- c. research and development costs
- d. manufacturing costs

| Answer: | d | Difficulty: | 1 | Objective: | 7 |
|-----------------|--------------|-------------|---|------------|---|
| Terms to Learn: | period costs | | | | |

- 134. Costs expensed on the income statement in the accounting period incurred are called:
 - a. direct costs
 - b. indirect costs
 - c. period costs
 - d. inventoriable costs

Answer:cDifficulty:1Objective:7Terms to Learn:period costs

- 135. Prime costs include:
 - a. direct materials and direct manufacturing labor costs
 - b. direct manufacturing labor and manufacturing overhead costs
 - c. direct materials and manufacturing overhead costs
 - d. only direct materials

Answer:aDifficulty:1Objective:7Terms to Learn:prime costs

136. Conversion costs include:

- a. direct materials and direct manufacturing labor costs
- b. direct manufacturing labor and manufacturing overhead costs
- c. direct materials and manufacturing overhead costs
- d. only direct materials

| Answer: | b | Difficulty: | 1 | Objective: | 7 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | conversion co | osts | | | |

137. Total manufacturing costs equal:

- a. direct materials + prime costs
- b. direct materials + conversion costs
- c. direct manufacturing labor costs + prime costs
- d. direct manufacturing labor costs + conversion costs

Answer:bDifficulty:2Objective:7Terms to Learn:prime costs, conversion costs

- 138. In the cost classification system used by manufacturing firms, total manufacturing costs would include all of the following EXCEPT:
 - a. direct materials costs and conversion costs
 - b. direct materials costs, direct manufacturing labor costs, and manufacturing overhead costs
 - c. indirect materials costs, indirect manufacturing labor costs, and manufacturing overhead costs
 - d. prime costs and manufacturing overhead costs

Answer:cDifficulty:2Objective:7Terms to Learn:prime costs, conversion costs

- 139. Manufacturing overhead costs may include all of the following EXCEPT:
 - a. salaries of the plant janitorial staff
 - b. labor that can be traced to individual products
 - c. wages paid for unproductive time due to machine breakdowns
 - d. overtime premiums paid to plant workers

Answer:bDifficulty:3Objective:7Terms to Learn:manufacturing overhead costs

- 140. Which of the following formulas determine cost of goods sold in a merchandising entity?
 - a. Beginning inventory + Purchases + Ending inventory = Cost of goods sold
 - b. Beginning inventory + Purchases Ending inventory = Costs of goods sold
 - c. Beginning inventory Purchases + Ending inventory = Cost of goods sold
 - d. Beginning inventory Ending inventory Purchases = Cost of goods sold

7

Answer:bDifficulty:1Objective:Terms to Learn:merchandising-sector companies

- 141. Which of the following formulas determine cost of goods sold in a manufacturing entity?
 - a. Beginning work-in-process inventory + Cost of goods manufactured Ending work-in-process inventory = Cost of goods sold
 - b. Beginning work-in-process inventory + Cost of goods manufactured + Ending work-in-process inventory = Cost of goods sold
 - c. Cost of goods manufactured Beginning finished goods inventory Ending finished goods inventory = Cost of goods sold
 - d. Cost of goods manufactured + Beginning finished goods inventory Ending finished goods inventory = Cost of goods sold

Answer:dDifficulty:2Objective:7Terms to Learn:manufacturing-sector companies

142. The following information pertains to the Cannady Corporation:

| Beginning work-in-process inventory | \$ | 50,000 |
|-------------------------------------|----|---------|
| Ending work-in-process inventory | | 48,000 |
| Beginning finished goods inventory | | 180,000 |
| Ending finished goods inventory | | 195,000 |
| Cost of goods manufactured | 1, | 220,000 |

What is cost of goods sold?

| | ф.4 | 225 | 000 |
|----|------------|-------|-----|
| a. | S I | ,235. | 000 |

- b. \$1,205,000
- c. \$1,218,000
- d. \$1,222,000

| Answer: | b | Difficulty: | 3 | Objective: | 7 |
|-------------|----------------|---------------------|-------|------------|---|
| \$180,000 + | \$1,220,000 - | \$195,000 = \$1,203 | 5,000 | | |
| Terms to Le | arn: cost of g | goods manufacture | d | | |

143. The following information pertains to the Duggan Corporation:

| Beginning work-in-process inventory | \$ 20,000 |
|-------------------------------------|-----------|
| Ending work-in-process inventory | 23,000 |
| Beginning finished goods inventory | 36,000 |
| Ending finished goods inventory | 34,000 |
| Cost of goods manufactured | 246,000 |

What is cost of goods sold?

- a. \$244,000
- b. \$248,000
- c. \$243,000
- d. \$249,000

| Answer: | b | Difficulty: | 2 | Objective: | 7 |
|----------------|--------------|--------------------|---|------------|---|
| \$36,000 + \$2 | 46,000 - \$3 | 34,000 = \$248,000 | | | |
| Terms to Lea | rn: cost of | goods manufactured | 1 | | |

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 144 THROUGH 146:

| Beginning finished goods, 1/1/20X3 | \$ 80,000 |
|------------------------------------|-----------|
| Ending finished goods, 12/31/20X3 | 67,000 |
| Cost of goods sold | 270,000 |
| Sales revenue | 500,000 |
| Operating expenses | 145,000 |

144. What is cost of goods manufactured for 20X3?

- a. \$230,000
- b. \$257,000
- c. \$283,000
- d. \$355,000

| | Answer: \$270,000 + \$67, Terms to Learn: | | , | | <i>Objective</i> : | 7 |
|------|---|----------------|----|---|--------------------|---|
| 145. | What is gross m a. \$283,000 b. \$355,000 c. \$230,000 d. \$257,000 | argin for 20X3 | ? | | | |
| | Answer: \$500,000 – \$270 Terms to Learn: | · · · · · | 00 | 2 | Objective: | 7 |

- 146. What is operating income for 20X3?
 - a. \$85,000
 - b. \$112,000
 - c. \$62,000
 - d. \$230,000

| Answer: | a | Difficulty: | 2 | Objective: | 7 |
|-------------------|--------|----------------------|---|------------|---|
| \$500,000 - \$270 | ,000 – | \$145,000 = \$85,000 | | | |
| Terms to Learn: | reven | ues, period costs | | | |

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 147 THROUGH 149:

| Beginning finished goods, 1/1/20X5 | \$ 40,000 |
|------------------------------------|-----------|
| Ending finished goods, 12/31/20X5 | 33,000 |
| Cost of goods sold | 250,000 |
| Sales revenue | 600,000 |
| Operating expenses | 120,000 |

147. What is cost of goods manufactured for 20X5?

- a. \$257,000
- b. \$350,000
- c. \$243,000
- d. \$250,000

| | Answer: \$250,000 + \$33, Terms to Learn: | , | | | <i>Objective</i> : | 7 |
|------|---|-----------------|-------------|---|--------------------|---|
| 148. | What is gross m | argin for 20X5 | 5? | | | |
| 1101 | a. \$243,000 | | • | | | |
| | b. \$527,000 | | | | | |
| | c. \$357,000 | | | | | |
| | d. \$350,000 | | | | | |
| | Answer: \$600,000 – \$250 Terms to Learn: | | 55 | 2 | <i>Objective</i> : | 7 |
| 149. | What is operatin | ig income for 2 | 20X5? | | | |
| | a. \$230,000 | 6 | | | | |
| | b. \$123,000 | | | | | |
| | c. \$107,000 | | | | | |
| | d. \$157,000 | | | | | |
| | Answer: | a | Difficulty: | 2 | Objective: | 7 |

 Answer:
 a
 Difficulty:
 2
 Obj

 \$600,000 - \$250,000 - \$120,000 = \$230,000 Terms to Learn:
 revenues, period costs
 Obj

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 150 THROUGH 153: The Singer Company manufactures several different products. Unit costs associated with Product ICT101 are as follows:

| Direct materials | \$ 60 |
|---------------------------------|--------------|
| Direct manufacturing labor | 10 |
| Variable manufacturing overhead | 18 |
| Fixed manufacturing overhead | 32 |
| Sales commissions (2% of sales) | 4 |
| Administrative salaries | 16 |
| Total | <u>\$140</u> |
| | |

150. What are the variable costs per unit associated with Product ICT101?

- a. \$18
- b. \$22
- c. \$88
- d. \$92

Answer:dDifficulty:2Objective:3\$60 + \$10 + \$18 + \$4 = \$92Terms to Learn:variable cost

151. What are the fixed costs per unit associated with Product ICT101?

\$102 a. \$48 b. c. \$52 \$32 d. Answer: Difficulty: 2 *Objective*: 3 b 32 + 16 = 48Terms to Learn: fixed cost 152. What are the inventoriable costs per unit associated with Product ICT101? \$120 a. b. \$140 \$50 c. \$88 d. Answer: Difficulty: 2 *Objective*: 7 а 60 + 10 + 18 + 32 = 120Terms to Learn: inventoriable cost 153. What are the period costs per unit associated with Product ICT101? \$4 a. b. \$16 \$20 c. d. \$52 Difficulty: 2 *Objective*: 7 Answer: С \$4 + 16 = \$20Terms to Learn: period cost

THE FOLLOWING INFORMATION APPLIES TO QUESTIONS 154 THROUGH 157: The West Company manufactures several different products. Unit costs associated with Product ORD203 are as follows:

| Direct materials | \$ 40 |
|---------------------------------|-------------|
| Direct manufacturing labor | 8 |
| Variable manufacturing overhead | 12 |
| Fixed manufacturing overhead | 23 |
| Sales commissions (2% of sales) | 6 |
| Administrative salaries | 9 |
| Total | <u>\$98</u> |
| | |

154. What are the variable costs per unit associated with Product ORD203?

- a. \$60
- b. \$83
- c. \$66
- d. \$48

Answer:cDifficulty:2Objective:3\$40 + \$8 + \$12 + \$6 = \$66Terms to Learn:variable cost

- 155. What are the fixed costs per unit associated with Product ORD203?
 - a. \$23
 b. \$32
 c. \$35
 - d. \$44

Answer:bDifficulty:2Objective:3\$23 + 9 = \$32Terms to Learn: fixed cost

156. What are the inventoriable costs per unit associated with Product ORD203?

- a. \$60
- b. \$66
- c. \$48
- d. \$83

Answer:dDifficulty:2Objective:7\$40 + \$8 + \$12 + \$23 = \$83Terms to Learn:inventoriable cost

- 157. What are the period costs per unit associated with Product ORD203?
 - a. \$15
 - b. \$6
 - c. \$9
 - d. \$27

Answer:aDifficulty:2Objective:7\$6 + 9 = \$15Terms to Learn: period cost \blacksquare \blacksquare \blacksquare

- 158. For last year, Wampum Enterprises reported revenues of \$420,000, cost of goods sold of \$108,000, cost of goods manufactured of \$101,000, and total operating costs of \$70,000. Operating income for that year was:
 - a. \$319,000
 - b. \$312,000
 - c. \$249,000
 - d. \$242,000

Answer:dDifficulty:2Objective:7\$420,000 - \$108,000 - \$70,000 = \$242,000Terms to Learn: revenues, cost of goods manufactured, period costs7

- 159. For last year, Wampum Enterprises reported revenues of \$420,000, cost of goods sold of \$108,000, cost of goods manufactured of \$101,000, and total operating costs of \$70,000. Gross margin for last year was:
 - a. \$319,000
 - b. \$312,000
 - c. \$249,000
 - d. \$242,000

Answer:bDifficulty:2Objective:7\$420,000 - \$108,000 = \$312,000Terms to Learn:revenues, cost of goods manufactured, period costs

160. For last year, Lewisburn Manufacturing reported the following:

| Revenue | \$420,000 |
|--|-----------|
| Beginning inventory of direct materials, January 1 | 22,000 |
| Purchases of direct materials | 146,000 |
| Ending inventory of direct materials, December 31 | 16,000 |
| Direct manufacturing labor | 18,000 |
| Indirect manufacturing costs | 40,000 |
| Beginning inventory of finished goods, January 1 | 35,000 |
| Cost of goods manufactured | 104,000 |
| Ending inventory of finished goods, December 31 | 36,000 |
| Operating costs | 140,000 |
| | |

What was Lewisburn's cost of goods sold?

- a. \$103,000
- b. \$152,000
- c. \$268,000
- d. \$317,000

Answer:aDifficulty:3Objective:7\$35,000 + \$104,000 - \$36,000 = \$103,000Terms to Learn:Revenues, cost of goods manufactured

161. For last year, Lewisburn Manufacturing reported the following:

| Revenue | \$420,000 |
|--|-----------|
| Beginning inventory of direct materials, January 1 | 22,000 |
| Purchases of direct materials | 146,000 |
| Ending inventory of direct materials, December 31 | 16,000 |
| Direct manufacturing labor | 18,000 |
| Indirect manufacturing costs | 40,000 |
| Beginning inventory of finished goods, January 1 | 35,000 |
| Cost of goods manufactured | 104,000 |
| Ending inventory of finished goods, December 31 | 36,000 |
| Operating costs | 140,000 |
| | |

What was Lewisburn's gross margin (or gross profit)?

- a. \$103,000
- b. \$152,000
- c. \$268,000
- d. \$317,000

 Answer:
 d
 Difficulty:
 3
 Objective:
 7

 \$420,000 - (\$35,000 + \$104,000 - \$36,000) = \$317,000 Terms to Learn:
 Revenues, cost of goods manufactured
 Terms to Learn:
 Revenues, cost of goods manufactured

162. For last year, Lewisburn Manufacturing reported the following:

| Revenue | \$420,000 |
|--|-----------|
| Beginning inventory of direct materials, January 1 | 22,000 |
| Purchases of direct materials | 146,000 |
| Ending inventory of direct materials, December 31 | 16,000 |
| Direct manufacturing labor | 18,000 |
| Indirect manufacturing costs | 40,000 |
| Beginning inventory of finished goods, January 1 | 35,000 |
| Cost of goods manufactured | 104,000 |
| Ending inventory of finished goods, December 31 | 36,000 |
| Operating costs | 140,000 |
| | |

What was Lewisburn's operating income?

- a. \$76,000
- b. \$128,000
- c. \$177,000
- d. \$280,000

Answer:cDifficulty:3Objective:7\$420,000 - (\$35,000 + \$104,000 - \$36,000) - \$140,000 = \$177,000Terms to Learn:Revenues, cost of goods manufactured

163. For last year, Lewisburn Manufacturing reported the following:

| Revenue | \$420,000 |
|--|-----------|
| Beginning inventory of direct materials, January 1 | 22,000 |
| Purchases of direct materials | 146,000 |
| Ending inventory of direct materials, December 31 | 16,000 |
| Direct manufacturing labor | 18,000 |
| Indirect manufacturing costs | 40,000 |
| Beginning inventory of finished goods, January 1 | 35,000 |
| Cost of goods manufactured | 104,000 |
| Ending inventory of finished goods, December 31 | 36,000 |
| Operating costs | 140,000 |
| | |

How much of the above would be considered period costs for Lewisburn Manufacturing?

a. \$104,000 \$140,000 b. \$246,000 c. \$390,000 d. *Difficulty:* 3 b *Objective:* 7 Answer: \$140.000 Terms to Learn: period costs 164. Product costs may refer to: inventoriable costs for external reporting a. design costs plus manufacturing costs for government contracts b. all costs incurred along the value chain for pricing decisions c. d. All of these answers are correct.

Answer:dDifficulty:3Objective:8Terms to Learn:product costs

- 165. Product costs used for pricing and product-mix decisions generally include:
 - a. manufacturing costs only
 - b. design costs plus manufacturing costs
 - c. all costs incurred along the value chain
 - d. distribution costs only

| Answer: | c | Difficulty: | 3 | Objective: | 8 |
|-----------------|---------------|-------------|---|------------|---|
| Terms to Learn: | product costs | | | | |

- 166. Product costs used for government contracts generally include:
 - a. manufacturing costs only
 - b. design costs plus manufacturing costs
 - c. all costs incurred along the value chain
 - d. distribution costs only

Answer:bDifficulty:3Objective:8Terms to Learn:product costs

167. Product costs used for external reporting generally include:

- a. manufacturing costs only
- b. design costs plus manufacturing costs
- c. all costs incurred along the value chain
- d. All of these answers are correct.

Answer:aDifficulty:2Objective:8Terms to Learn:product costs

- 168. Inventoriable costs for external reporting purposes are also called:
 - a. product costs
 - b. period costs
 - c. variable costs
 - d. direct manufacturing costs

Answer:aDifficulty:1Objective:8Terms to Learn:inventoriable costs

169. For external reporting:

- a. costs are classified as either inventoriable or period costs
- b. costs reflect current values
- c. there are no prescribed rules since no one is exactly sure how investors and creditors will use these numbers
- d. costs include amounts that reflect both current and future benefits

Answer:aDifficulty:2Objective:8Terms to Learn:inventoriable costs, period costs

- 170. Which of the following statements is FALSE?
 - a. Product costs and inventoriable costs are interchangeable terms.
 - b. Inventoriable costs are important for GAAP.
 - c. Inventoriable costs are a special case of product costs.
 - d. "Product costs" refers to the particular costs of a product for the purpose at hand.

Answer:aDifficulty:3Objective:8Terms to Learn:product costs, inventoriable costs

- 171. Debated items that some companies include as direct manufacturing labor include:
 - a. fringe benefits
 - b. vacation pay
 - c. training time
 - d. All of these answers are correct.

| Answer: | d | Difficulty: | 2 | Objective: | 8 |
|-----------------|----------|--------------------|---------|------------|---|
| Terms to Learn: | direct m | anufacturing labor | r costs | | |

- 172. Brenda Hicks is paid \$10 an hour for straight-time and \$15 an hour for overtime. One week she worked 42 hours, which included 2 hours of overtime. Compensation would be reported as:
 - a. \$400 of direct labor and \$30 of manufacturing overhead
 - b. \$400 of direct labor and \$0 of manufacturing overhead
 - c. \$420 of direct labor and \$10 of manufacturing overhead
 - d. \$430 of direct labor and \$0 of manufacturing overhead

Answer:cDifficulty:2Objective:8Direct labor (42 hours x \$10) + Overtime premium (2 hrs x \$5) = \$430Terms to Learn:overtime premium, direct manufacturing labor costs

- 173. Rodney Worsham is paid \$10 an hour for straight-time and \$15 an hour for overtime. One week he worked 45 hours, which included 5 hours of overtime, and 3 hours of idle time caused by material shortages. Compensation would be reported as:
 - a. \$370 of direct labor and \$105 of manufacturing overhead
 - b. \$420 of direct labor and \$55 of manufacturing overhead
 - c. \$450 of direct labor and \$25 of manufacturing overhead
 - d. \$445 of direct labor and \$30 of manufacturing overhead

Answer:bDifficulty:3Objective:8Direct labor (42 hours x \$10) + Idle time (3 hrs x \$10) + Overtime premium (5 hrs x \$5) = \$475

Terms to Learn: overtime premium, direct manufacturing labor costs, idle time

- 174. Joseph Davis worked 44 hours last week for Breakgood Manufacturing. Of the 44 hours 4 hours were considered overtime, and also Davis was idle for 5 of the 44 hours due to an equipment malfunction. Davis makes \$20 per hour and is paid \$30 an hour (time and a half) for overtime. Davis' total compensation for that week would be _____, and assuming Breakgood charges overtime premium and idle time to indirect labor, the amount of this compensation credited to indirect labor would be _____.
 - a. \$840; \$40
 - b. \$840; \$140
 - c. \$920; \$40
 - d. \$920; \$140

Answer:dDifficulty:3Objective:8total compensation $(40 \times \$20) + (4 \times \$30) = \$920$;indirect labor $(5 \times \$20) + (4 \times \$10) = \$140$ Terms to Learn:indirect manufacturing costs, overtime premium, idle time

- 175. When making decisions:
 - a. it is best to use average costs
 - b. it is best to use unit costs
 - c. it is best to use total costs rather than unit costs
 - d. All of these types of costs can be used for decision making; it varies depending on the decision required.

Answer:dDifficulty:2Objective:9Terms to Learn:average cost, total cost, unit cost

EXERCISES AND PROBLEMS

176. Lucas Manufacturing has three cost objects that it uses to accumulate costs for its manufacturing plants. They are:

| Cost object #1: | The physical buildings and equipment |
|-----------------|---|
| Cost object #2: | The use of buildings and equipment |
| Cost object #3: | The availability and use of manufacturing labor |

The following manufacturing overhead cost categories are found in the accounting records:

- a. Depreciation on buildings and equipment
- b. Lubricants for machines
- c. Property insurance
- d. Supervisors' salaries
- e. Fringe benefits
- f. Property taxes
- g. Utilities

Required:

Assign each of the above costs to the most appropriate cost object.

Answer:

Cost object # 1 includes categories a, c, and f.

Cost object # 2 includes categories b and g.

Cost object # 3 includes categories d and e.

Difficulty: 2 Objective: 1 Terms to Learn: cost object

177. Archambeau Products Company manufactures office furniture. Recently, the company decided to develop a formal cost accounting system and classify all costs into three categories. Categorize each of the following items as being appropriate for (1) cost tracing to the finished furniture, (2) cost allocation of an indirect manufacturing cost to the finished furniture, or (3) as a nonmanufacturing item.

| Item | Cost <u>Tracing</u> | Cost <u>Allocation</u> | Nonmanu- <u>facturing</u> |
|--------------------------------|------------------------|---------------------------|------------------------------|
| Carpenter wages | | | |
| Depreciation - office building | | | |
| Glue for assembly | | | |
| Lathe department supervisor | | | |
| Lathe depreciation | | | |
| Lathe maintenance | | | |
| Lathe operator wages | | | |
| Lumber | | | |
| Samples for trade shows | | | |
| Metal brackets for drawers | | | |
| Factory washroom supplies | | | |

Answer:

| <u>Item</u> | Cost <u>Tracing</u> | | Nonmanu- <u>facturing</u> |
|--------------------------------|------------------------|---|------------------------------|
| Carpenter wages | Х | | |
| Depreciation - office building | | | Х |
| Glue for assembly | | Х | |
| Lathe department supervisor | | Х | |
| Lathe depreciation | | Х | |
| Lathe maintenance | | Х | |
| Lathe operator wages | | Х | |
| Lumber | Х | | |
| Samples for trade shows | | | Х |
| Metal brackets for drawers | Х | | |
| Factory washroom supplies | | Х | |
| | | | |
| | | | |

Difficulty: 2 Objective: 2

Terms to Learn: cost tracing, cost

allocation

178. Butler Hospital wants to estimate the cost for each patient stay. It is a general health care facility offering only basic services and not specialized services such as organ transplants.

Required:

- a. Classify each of the following costs as either direct or indirect with respect to each patient.
- b. Classify each of the following costs as either fixed or variable with respect to hospital costs per day.

| | Direct | Indirect | Fixed | <u>Variable</u> |
|---|--------------------|----------------------|-------------------|----------------------|
| Electronic monitoring | | | | |
| Meals for patients | | | | |
| Nurses' salaries | | | | |
| Parking maintenance | | | | |
| Security | | | | |
| | | | | |
| Answer: | Direct | Indirect | Fixed | <u>Variable</u> |
| | <u>Direct</u> X | <u>Indirect</u> | <u>Fixed</u> | <u>Variable</u> X |
| Electronic monitoring | | <u>Indirect</u> | <u>Fixed</u> | |
| | X | <u>Indirect</u> X | <u>Fixed</u> X | X |
| Electronic monitoring Meals for patients | X | | | X |
| Electronic monitoring Meals for patients Nurses' salaries | X | X | X | X |

Difficulty: 2 Objectives: 2, 3 Terms to Learn: direct costs, indirect costs, fixed costs, variable costs

179. Springfield Manufacturing produces electronic storage devices, and uses the following three-part classification for its manufacturing costs: direct materials, direct manufacturing labor, and indirect manufacturing costs. Total indirect manufacturing costs for January were \$300 million, and were allocated to each product on the basis of direct manufacturing labor costs of each line. Summary data (in millions) for January for the most popular electronic storage device, the Big Bertha, was:

| | Big Bertha |
|----------------------------------|-------------|
| Direct manufacturing costs | \$9,000,000 |
| Direct manufacturing labor costs | \$3,000,000 |
| Indirect manufacturing costs | \$8,500,000 |
| Units produced | 40,000 |

Required:

- a. Compute the manufacturing cost per unit for each product produced in January.
- b. Suppose production will be reduced to 30,000 units in February. Speculate as to whether the unit costs in February will most likely be higher or lower than unit costs in January; it is not necessary to calculate the exact February unit cost. Briefly explain your reasoning.

Answer:

- a. Unit costs for January were: (\$9,000,000 + \$3,000,000 + \$8,500,000) / 40,000 = \$512.50 per unit
- b. Unit costs should be higher in February if only 30,000 units are to be produced. Indirect manufacturing costs most likely include both fixed and variable components. Since fewer units are expected to be produced in February, total fixed costs will be spread over fewer units. This will result in an increase in total cost per unit since variable costs per unit will most likely not change with the decreased production.

Difficulty: 2 Objectives: 2,3,4 Terms to Learn: unit cost

180. Whippany manufacturing wants to estimate costs for each product they produce at its Troy plant. The Troy plant produces three products at this plant, and runs two flexible assembly lines. Each assembly line can produce all three products.

Required:

- a. Classify each of the following costs as either direct or indirect for each product.
- b. Classify each of the following costs as either fixed or variable with respect to the number of units produced of each product.

| | Direct | Indirect | Fixed | Variable |
|---------------------------|--------|----------|-------|----------|
| | | | | |
| Assembly line labor | | | | |
| wages | | | | |
| Plant manager's wages | | | | |
| Depreciation on the | | | | |
| assembly line equipment | | | | |
| Component parts for the | | | | |
| product | | | | |
| Wages of security | | | | |
| personnel for the factory | | | | |

Answer:

| | Direct | <u>Indirect</u> | Fixed | <u>Variable</u> | |
|--|---------------|-----------------|--------------|-----------------|--|
| Assembly line labor wages | x | | | х | |
| Plant manager's wages | 7 | Х | Х | Α | |
| Depreciation on the assembly line equipment | | Х | Х | | |
| Component parts for the product Adhesive to hold the | Х | | | Х | |
| parts together and is an insignificant part of the final cost of the product | | Х | | Х | |
| | | | | | |

Difficulty: 2 Objectives: 2,3,4 Terms to Learn: fixed cost, variable cost, direct cost, indirect cost

181. The list of representative cost drivers in the right column below are randomized with respect to the list of functions in the left column. That is, they do not match.

| | Function | | Representative Cost Driver |
|----|------------------|----|-----------------------------|
| 1. | Purchasing | А. | Number of employees |
| 2. | Billing | В. | Number of shipments |
| 3. | Shipping | C. | Number of customers |
| 4. | Computer Support | D. | Number of invoices |
| 5. | Personnel | E. | Number of desktop computers |
| 6. | Customer Service | F. | Number of purchase orders |

Required:

Match each business function with its representative cost driver.

| | Function | Insert letter of appropriate driver (A through F) |
|----|------------------|--|
| 1. | Purchasing | |
| 2. | Billing | |
| 3. | Shipping | |
| 4. | Computer Support | |
| 5. | Personnel | |
| 6. | Customer service | |

Answer:

| | Function | Insert letter of appropriate driver (A through F) |
|----|------------------|--|
| 1. | Purchasing | F |
| 2. | Billing | D |
| 3. | Shipping | В |
| 4. | Computer support | Е |
| 5. | Personnel | А |
| 6. | Customer service | C |

Difficulty: 2 Objective: 3 Terms to Learn: cost driver

182. Combs, Inc., reports the following information for September sales:

| Sales | \$15,000 |
|------------------|-----------------|
| Variable costs | 3,000 |
| Fixed costs | 4,000 |
| Operating income | <u>\$ 8,000</u> |

Required:

If sales double in October, what is the projected operating income?

Answer:

(\$15,000 x 2) - (\$3,000 x 2) - \$4,000 = \$20,000

Difficulty: 2 Objective: 4 Terms to Learn: fixed cost, variable cost

183. Axle and Wheel Manufacturing currently produces 1,000 axles per month. The following per unit data apply for sales to regular customers:

| Direct materials | \$200 |
|---------------------------------|--------------|
| Direct manufacturing labor | 30 |
| Variable manufacturing overhead | 60 |
| Fixed manufacturing overhead | <u>40</u> |
| Total manufacturing costs | <u>\$330</u> |

The plant has capacity for 2,000 axles.

Required:

- a. What is the total cost of producing 1,000 axles?
- b. What is the total cost of producing 1,500 axles?
- c. What is the per unit cost when producing 1,500 axles?

Answer:

- a. $[(\$200 + \$30 + \$60) \times 1,000 \text{ units}] + (\$40 \times 1,000 \text{ units}) = \$330,000$
- b. [(\$200 + \$30 + \$60) x 1,500 units] + \$40,000 = \$475,000
- c. \$475,000 / 1,500 = \$316.67 per unit

| Difficulty: 2 | Objective: 4 | Terms to Learn: | fixed cost, variable cost, |
|---------------|--------------|-----------------|----------------------------|
| | | | unit cost |

184. The following information pertains to Ball Company:

| Manufacturing costs | \$2,400,000 |
|---------------------|-------------|
| Units manufactured | 40,000 |
| Beginning inventory | 0 units |

39,800 units are sold during the year for \$100 per unit.

Required:

- a. What is the average manufacturing cost per unit?
- b. What is the amount of ending finished goods inventory?
- c. What is the amount of gross margin?

Answer:

- a. \$2,400,000 / 40,000 = \$60.00
- b. $(40,000 39,800) \ge 60 = 12,000$
- c. $39,800 \ge (\$100 \$60) = \$1,592,000$

Difficulty: 2 Objectives: 3, 4, 7 Terms to Learn: unit cost, finished goods

185. Evans Inc., had the following activities during 20X5:

| Direct materials: | |
|-------------------------------------|-----------|
| Beginning inventory | \$ 40,000 |
| Purchases | 123,200 |
| Ending inventory | 20,800 |
| Direct manufacturing labor | 32,000 |
| Manufacturing overhead | 24,000 |
| Beginning work-in-process inventory | 1,600 |
| Ending work-in-process inventory | 8,000 |
| Beginning finished goods inventory | 48,000 |
| Ending finished goods inventory | 32,000 |

Required:

- a. What is the cost of direct materials used during 20X5?
- b. What is cost of goods manufactured for 20X5?
- c. What is cost of goods sold for 20X5?
- d. What amount of prime costs was added to production during 20X5?
- e. What amount of conversion costs was added to production during 20X5?

Answer:

- a. \$40,000 + \$123,200 \$20,800 = \$142,400
- b. \$142,400 + \$32,000 + \$24,000 + \$1,600 \$8,000 = \$192,000
- c. \$192,000 + \$48,000 \$32,000 = \$208,000
- d. \$142,400 + \$32,000 = \$174,400
- e. \$32,000 + \$24,000 = \$56,000

| Difficulty: 2 | Objectives: 6, 7 | Terms to Learn: | direct cost, indirect cost, |
|---------------|------------------|-----------------|-----------------------------|
| | | | prime cost, conversion |
| | | | cost |

186. Helmer Sporting Goods Company manufactured 100,000 units in 20X5and reported the following costs:

| Sandpaper | \$ 32,000 | Leasing costs — plant | \$ 384,000 |
|------------------------------|-----------|----------------------------|------------|
| Materials handling | 320,000 | Depreciation — equipment | 224,000 |
| Coolants & lubricants | 22,400 | Property taxes — equipment | 32,000 |
| Indirect manufacturing labor | 275,200 | Fire insurance — equipment | 16,000 |
| Direct manufacturing labor | 2,176,000 | Direct material purchases | 3,136,000 |
| Direct materials, 1/1/X5 | 384,000 | Direct materials, 12/31/X5 | 275,200 |
| Finished goods, 1/1/X5 | 672,000 | Sales revenue | 12,800,000 |
| Finished goods, 12/31/X5 | 1,280,000 | Sales commissions | 640,000 |
| Work-in-process, 1/1/X5 | 96,000 | Sales salaries | 576,000 |
| Work-in-process, 12/31/X5 | 64,000 | Advertising costs | 480,000 |
| | | Administration costs | 800,000 |

Required:

- a. What is the amount of direct materials used during 20X5?
- b. What manufacturing costs were added to WIP during 20X5?
- c. What is cost of goods manufactured for 20X5?
- d. What is cost of goods sold for 20X5?

Answer:

- a. \$384,000 + \$3,136,000 \$275,200 = \$3,244,800
- b. \$3,244,800 + \$2,176,000 + \$32,000 + \$320,000 + \$22,400 + \$275,200 + \$384,000 + \$224,000 + \$32,000 + \$16,000 = \$6,726,400
- c. \$6,726,400 + \$96,000 \$64,000 = \$6,758,400
- d. \$6,758,400 + \$672,000 \$1,280,000 = \$6,150,400
- Difficulty: 3 Objectives: 6,7 Terms to Learn: cost of goods manufactured

187. Messinger Manufacturing Company had the following account balances for the quarter ending March 31, unless otherwise noted:

| Work-in-process inventory (January 1) | \$ 140,400 |
|--|------------|
| Work-in-process inventory (March 31) | 171,000 |
| Finished goods inventory (January 1) | 540,000 |
| Finished goods inventory (March 31) | 510,000 |
| Direct materials used | 378,000 |
| Indirect materials used | 84,000 |
| Direct manufacturing labor | 480,000 |
| Indirect manufacturing labor | 186,000 |
| Property taxes on manufacturing plant building | 28,800 |
| Salespersons' company vehicle costs | 12,000 |
| Depreciation of manufacturing equipment | 264,000 |
| Depreciation of office equipment | 123,600 |
| Miscellaneous plant overhead | 135,000 |
| Plant utilities | 92,400 |
| General office expenses | 305,400 |
| Marketing distribution costs | 30,000 |

Required:

a. Prepare a cost of goods manufactured schedule for the quarter.

b. Prepare a cost of goods sold schedule for the quarter.

Answer:

a.

Messinger Manufacturing Company Cost of Goods Manufactured Schedule For quarter ending March 31

| Direct materials used Direct manufacturing labor | | \$ 378,000 480,000 |
|---|---------------|-----------------------|
| Manufacturing overhead | | |
| Depreciation of manufacturing equipment | \$264,000 | |
| Indirect manufacturing labor | 186,000 | |
| Indirect materials | 84,000 | |
| Miscellaneous plant overhead | 135,000 | |
| Plant utilities | 92,400 | |
| Property taxes on building | <u>28,800</u> | 790,200 |
| Manufacturing costs incurred | | \$1,648,200 |
| Add beginning work-in-process inventory | | 140,400 |
| Total manufacturing costs | | \$1,788,600 |
| Less ending work-in-process inventory | | 171,000 |
| Cost of goods manufactured | | <u>\$1,617,600</u> |

b.

Messinger Manufacturing Company Cost of Goods Sold Schedule For the quarter ending March 31

| Beginning finished goods inventory | | \$ 540,000 | |
|------------------------------------|-----------------|-----------------|--------------------|
| Cost of goods manufactured | | 1,617,600 | |
| Cost of goods available for sale | | 2,157,600 | |
| Ending finished goods inventory | | (510,000) | |
| Cost of goo | ods sold | | <u>\$1,647,600</u> |
| | . | | |
| Difficulty: 2 | Objectives: 6,7 | Terms to Learn: | cost of goods |

manufactured

| 188. | Using the following information find the unknown amounts. | Assume each set of |
|------|---|--------------------|
| | information is an independent case. | |
| | | |

| a. | Merchandise Inventory | Purchases Cost of goods sold Beginning balance Ending balance | \$420,000 446,000 82,000 ? |
|----|---------------------------|--|-------------------------------------|
| b. | Direct Materials | Beginning balance Ending balance Purchases Direct materials used | \$ 14,000 28,000 96,000 ? |
| c. | Work-in-process Inventory | Ending balance Cost of goods manufactured Beginning balance Current manufacturing costs | \$ 44,000 42,000 16,000 ? |
| d. | Finished Goods Inventory | Cost of goods manufactured Ending balance Cost of goods sold Beginning balance | \$124,000 40,000 122,000 ? |

Answer:

- a. Ending balance of merchandise inventory: \$82,000 + \$420,000 - \$446,000 = \$56,000
- b. Direct materials used: \$14,000 + \$96,000 - \$28,000 = \$82,000
- c. Current manufacturing costs: \$42,000 + \$44,000 - \$16,000 = \$70,000
- d. Beginning balance of finished goods inventory: \$40,000 + \$122,000 \$124,000 = \$38,000

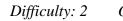
| Difficulty: 2 | Objectives: 6, 7 | Terms to Learn: | cost of goods |
|---------------|------------------|-----------------|---------------|
| | | | manufactured |

189. Each of the following items pertains to one of these companies: Bedell Electronics (a manufacturing company), Gregory Food Retailers (a merchandising company), and Larson Real Estate (a service sector company). Classify each item as either inventoriable (I) costs or period (P) costs.

| | | inventoriable (I) costs or period (P) costs |
|----|--|--|
| a. | Salary of Bedell Electronics president | |
| b. | Depreciation on Bedell Electronics assembly | |
| | equipment. | |
| с. | Salaries of Bedell's assembly line workers | |
| d | Purchase of frozen food for sale to customers | |
| | by Gregory Food Retailers | |
| e | Salaries of frozen food personnel at Gregory | |
| | Food Retailing | |
| f | Depreciation on freezers at Gregory Food | |
| | Retailing | |
| g. | Salary of a receptionist at Larson Real Estate | |
| h. | Depreciation on a computer at Larson Real | |
| | Estate | |
| i. | Salary of a real estate agent at Larson Real | |
| | Estate | |

Answer:

| | | inventoriable (I) costs or period (P) costs |
|----|--|--|
| a. | Salary of Bedell Electronics president | Р |
| b. | Depreciation on Bedell Electronics assembly equipment. | Ι |
| c. | Salaries of Bedell's assembly line workers | Ι |
| d | Purchase of frozen food for sale to customers by Gregory Food Retailers | Ι |
| e | Salaries of frozen food personnel at Gregory Food Retailing | Р |
| f | Depreciation on freezers at Gregory Food Retailing | Р |
| g. | Salary of a receptionist at Larson Real Estate | Р |
| h. | Depreciation on a computer at Larson Real Estate | Р |
| i. | Salary of a real estate agent at Larson Real Estate | Р |



Objective: 7 *Terms to Learn:*

Terms to Learn: inventoriable costs, period costs

190. On the assembly floor, Cynthia Evans is paid \$20 an hour for straight-time and \$30 an hour for overtime. One week she worked 43 hours, which included 3 hours of overtime.

Required:

- a. What is Cynthia's total compensation for the week?
- b. What amount of compensation would be reported as direct manufacturing labor?
- c. What amount of compensation would be reported as manufacturing overhead?

Answer:

- a. Direct labor (43 hours x \$20) + Overtime premium (3 hrs x \$10) = \$890
- b. Direct manufacturing labor (43 hours x \$20) = \$860
- c. Manufacturing overhead costs = Overtime premium (3 hrs x \$10) = \$30

Difficulty: 2 Objective: 7 Terms to Learn: overtime premium

191. In the manufacturing plant, Leslie Grant is paid \$20 an hour for straight-time and \$30 an hour for overtime. One week she worked 46 hours, which included 6 hours of overtime, and 4 hours of idle time caused by material shortages.

Required:

- a. What is Leslie's total compensation for the week?
- b. What amount of compensation would be reported as direct manufacturing labor?
- c. What amount of compensation would be reported as manufacturing overhead?

Answer:

- a. Direct manufacturing labor (42 hours x \$20) + Idle time (4 hrs x \$20) + Overtime premium (6 hrs x \$10) = \$980
- b. Direct manufacturing labor (42 hours x \$20) = \$840
- c. Manufacturing overhead costs = Idle time (4 hrs x 20) + Overtime premium (6 hrs x 10) = 140

Difficulty: 2 Objective: 7 Terms to Learn: overtime premium, idle time

CRITICAL THINKING

192. What is the meaning of the term "cost object"? Give an example of a cost object that would be used in a manufacturing company, a merchandising company, and a service sector company?

Answer:

A cost object is anything for which a measurement of costs is desired. An example of a cost object for a manufacturing company might be the cost of manufacturing a particular product. An example of a cost object for a merchandising company might be a particular department of a retail store. An example of a cost object for a service sector company might be the cost to serve or supply a particular customer.

Difficulty: 3 Objectives: 1,5 Terms to Learn: cost object

193. Why is it possible that a raw material such as glue might be considered as an indirect material for one furniture manufacturer and as a direct material for another furniture manufacture?

Answer:

It is possible for a raw material such as glue to be considered as an indirect material by one furniture manufacturer and as a direct material by another furniture manufacturer. The decision is largely a choice by the manufacturer and depends on a number of factors including the materiality of the cost in question, the cost of gathering the information, and the design of the manufacturing process. If the product in question has an insignificant cost, it might not be worth the trouble to trace the cost of the glue to each piece of furniture, and the glue would be considered indirect. If the cost of tracing the cost of the glue is high in relation to the benefits received from tracing it, the glue would likely be considered as indirect material. If the design of the manufacturing process easily permits all the glue to be traced to a single type of furniture, then it would be easy for a company to consider that material to be direct. Overall, the direct/indirect classification is decided on a cost/benefit basis.

Difficulty: 3 Objective: 2 Terms to Learn: direct material

194. What are the differences between direct costs and indirect costs? Give an example of each.

Answer:

Direct costs are costs that can be traced easily to the product manufactured or the service rendered. Examples of direct costs include direct materials and direct manufacturing labor used in a product. *Indirect* costs cannot be easily identified with individual products or services rendered, and are usually assigned using allocation formulas. In a plant that manufactures multiple products, examples of indirect costs include the plant supervisor's salary and the cost of machines used to produce more than one type of product.

Difficulty: 2 Objective: 2 Terms to Learn: direct costs, indirect costs

195. Describe a variable cost. Describe a fixed cost. Explain why the distinction between variable and fixed costs is important in cost accounting.

Answer:

Total variable costs increase with increased production or sales volumes. *Fixed* costs are not influenced by fluctuations in production or sales volumes. Without the knowledge of cost behaviors, budgets and other forecasting tools will be inaccurate and unreliable. Understanding whether a cost behaves as a variable or a fixed cost is essential to estimating and planning for business success.

Difficulty: 2 Objective: 3 Terms to Learn: variable cost, fixed cost

196. Explain the difference between an inventoriable cost and a period cost. What potential problems does an inaccurate classification of product and period costs cause?

Answer:

Inventoriable costs are all costs of a product that are considered as assets in the balance sheet when they are incurred and which become cost of goods sold only when the product is sold. Period costs are treated as expenses of the accounting period in which they are incurred. An inaccurate classification of inventoriable and period costs could lead to violations of the matching principle, which states that costs used in producing revenue should be matched on the income statement when the revenue is recognized. In extreme cases, net income for a given period might be significantly misstated if proper matching does not occur.

Difficulty: 2 Objective: 7 Terms to Learn: inventoriable cost

197. When should the overtime premium of direct manufacturing labor be considered an indirect manufacturing cost? A direct manufacturing cost?

Answer:

The overtime premium of direct manufacturing labor should be considered an indirect manufacturing cost when it is attributable to the overall volume of work, and a direct manufacturing cost when a "rush job" is the sole source of the overtime.

Difficulty: 2 Objective: 7 Terms to Learn: overtime premium