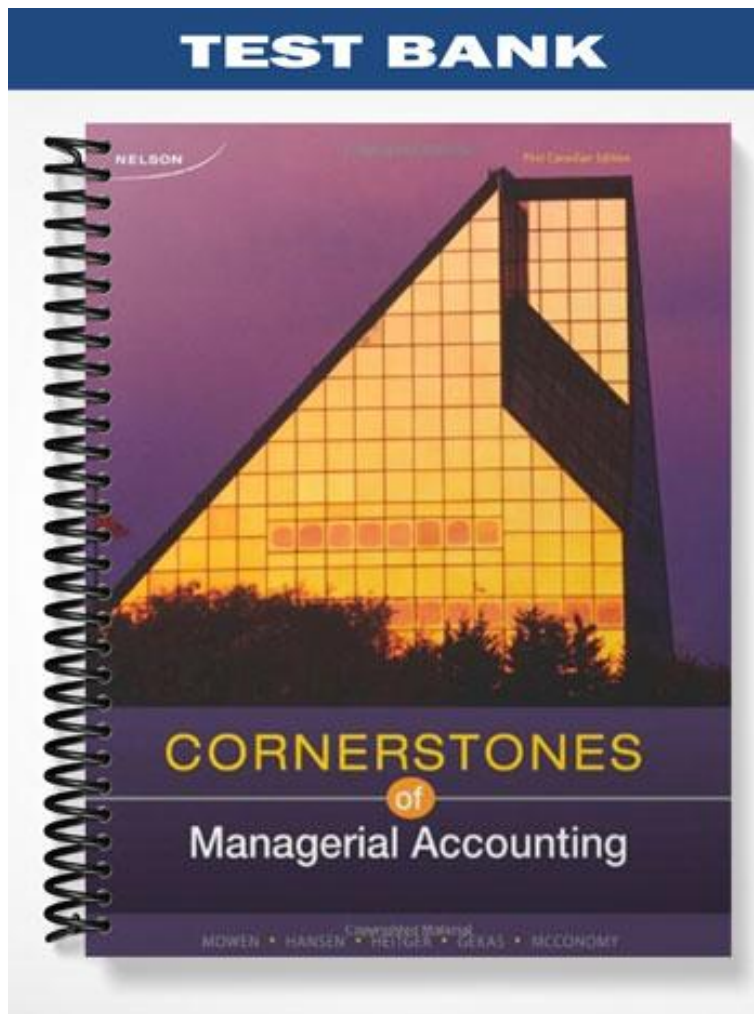


# TEST BANK



## Chapter 2—Basic Managerial Accounting Concepts

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### MULTIPLE CHOICE

1. What are expired costs called?
- assets
  - expenses
  - revenues
  - profit

ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

2. In terms of managerial accounting, what is the best definition of cost?
- the amount of cash or cash equivalent sacrificed for goods or services that are expected to bring a current or future benefit to the organization
  - a dollar measure of the cash used to achieve a given benefit
  - the asset incurred to produce future benefits
  - is equal to cost of goods sold

ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

3. Which of the following is a characteristic of price per unit?
- It is equal to the revenue.
  - It must be less than cost for the firm to earn income.
  - It is the same as total cost.
  - It is the same as cost per unit plus income per unit.

ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

4. What is the definition of assigning costs?
- Assigning costs is the way costs are measured and recorded.
  - Assigning costs tells the company what money was spent
  - Assigning costs is the allocation when applied to a cost object using a reasonable and convenient method
  - Assigning cost is the benefit given up when one choice is made over another

ANS: C                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

5. Which of the following is included in non-manufacturing costs?
- marketing and administration
  - direct materials
  - indirect materials
  - overhead

ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

6. What is one of the main purposes of assigning costs to cost objects?
- It provides information on why money was spent for decision making.
  - It cannot be accomplished in a number of ways.
  - It is always a very simple process.
  - It is rarely done in manufacturing.

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

7. Which of the following is a characteristic of an indirect cost?
- Indirect costs can be easily and accurately traced to a cost object.
  - Indirect costs are shared between or among more than one cost object.
  - Indirect costs should always be assigned to a cost object.
  - Indirect costs include all labour.

ANS: B                      PTS: 1                      DIF: Medium                      REF: p. 33  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

8. What is the behaviour pattern of a variable cost?
- It increases in total as output increases.
  - It remains constant in total at all levels of output.
  - It increases per unit as output increases.
  - It decreases per unit as output increases.

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 34  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

9. What is the definition of opportunity cost?
- a cost that increases as output increases and decreases as output decreases
  - a cost that does not increase as output increases and does not decrease as output decreases
  - the benefit given up or sacrificed when one alternative is chosen over another
  - a cost that cannot be easily and accurately traced to a cost object

ANS: C                      PTS: 1                      DIF: Easy                      REF: p.34  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

10. Which of the following is an example of an intangible product?

- a. hamburgers
- b. computers
- c. automobiles
- d. dental care

ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 35  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

11. Which of the following is an example of a tangible product?

- a. funeral care
- b. legal services
- c. furniture
- d. video rental

ANS: C                      PTS: 1                      DIF: Easy                      REF: p. 35  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

12. How does a company report production costs that are NOT attached to units that are sold?

- a. as selling expenses
- b. as cost of goods sold
- c. as administrative costs
- d. as inventory

ANS: D                      PTS: 1                      DIF: Medium                      REF: p.35  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; inferring

13. Costs are subdivided into which two major functional categories?

- a. production and nonproduction
- b. selling and administration
- c. prime and conversion
- d. opportunity and direct

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

14. Which of the following is an example of a direct materials cost?

- a. the windshield on a new automobile
- b. the nails used to construct a new house
- c. the glue used to build cabinets
- d. the solder used to manufacture televisions

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

15. Which of the following statements best describes a product cost?
- Product costs are direct materials and direct labour costs only.
  - Product costs are manufacturing costs.
  - Product costs do not include overhead.
  - Product costs do not include direct materials.

ANS: B                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; understanding

16. Which of the following are production costs?
- selling costs, administrative costs, and period costs
  - indirect materials, indirect labour, and administrative costs
  - direct materials, direct labour, and selling costs
  - direct materials, direct labour, and overhead

ANS: D                      PTS: 1                      DIF: Challenging                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

17. Which of the following is an example of a direct materials cost?
- the nails in a dining room table
  - the engine in an airplane
  - the glue used to manufacture furniture
  - the paint on a new car

ANS: B                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

18. When do materials in the raw materials account become direct materials?
- when they are withdrawn from inventory for use in production
  - when the materials are returned to the supplier
  - when the materials are spoiled
  - when they are put into production

ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; differentiating

19. Which of the following job positions is an example of direct labour?
- the chef in a restaurant
  - the caretaker in a production plant
  - the security guard for the factory
  - a management accountant

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

20. What type of cost is direct labour?

- a. a nonproduction cost
- b. a period cost
- c. a nonmanufacturing cost
- d. a product cost

ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

21. Which of the following expenses is included in manufacturing overhead?

- a. production line supervisor
- b. wood used to manufacture furniture
- c. direct labour wages for a production line worker
- d. advertising for the product

ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

22. Which of the following expenses is included in overhead?

- a. marketing costs
- b. property taxes on the factory
- c. utility costs at the head office
- d. depreciation on head office furniture

ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

23. Which of the following labour costs is included in indirect labour?

- a. the salary of the vice-president of marketing
- b. the salary of the CEO
- c. the salary of factory supervisor
- d. the wages of the production line worker

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

24. How is prime cost calculated?

- a. indirect materials cost plus indirect labour cost
- b. direct materials cost plus direct labour cost
- c. period costs plus overhead cost
- d. selling cost plus administrative cost

ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

25. How is conversion cost calculated?
- direct materials cost plus prime costs
  - indirect labour cost plus opportunity costs
  - product costs plus period costs
  - direct labour cost plus overhead cost

ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

26. How is unit cost calculated?
- total product costs divided by the number of units produced
  - period costs divided by the total number of units produced
  - total prime costs divided by the number of units produced
  - total conversion costs divided by the number of units produced

ANS: A                      PTS: 1                      DIF: Challenging                      REF: p. 38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

27. Which of the following is a period cost?
- direct materials
  - indirect labour
  - indirect materials
  - depreciation on an office building

ANS: D                      PTS: 1                      DIF: Medium                      REF: p. 38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

28. Which of the following is true for a period cost?
- they include selling costs and administrative costs
  - they are used to compute product cost
  - they can be included in overhead costs
  - they are carried in inventory until the goods are sold

ANS: A                      PTS: 1                      DIF: Medium                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; inferring

29. Which of the following is an example of a period cost?
- direct materials
  - direct labour
  - general accounting
  - manufacturing overhead

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; classifying

30. Rancor, Inc., had a per-unit conversion cost of \$2.50 during April and incurred a direct materials cost of \$100,000, direct labour costs of \$75,000, and overhead costs of \$45,000. How many units did Rancor manufacture during April?
- a. 18,000
  - b. 30,000
  - c. 48,000
  - d. 70,000

ANS: C

SUPPORTING CALCULATIONS:

$$(\$75,000 + \$45,000)/\$2.50 = \$48,000$$

PTS: 1                      DIF: Challenging      REF: p.38

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing

31. Lakeland, Inc., manufactured 5,000 units during the month of March and incurred a direct materials cost of \$100,000 and an overhead cost of \$40,000. Suppose the per-unit prime cost was \$26.00 per unit. How much direct labour cost did Lakeland incur during March?
- a. \$20,000
  - b. \$30,000
  - c. \$35,000
  - d. \$90,000

ANS: B

SUPPORTING CALCULATIONS:

$$(\$100,000 + \$40,000)/5,000 = \$26.00$$

PTS: 1                      DIF: Medium              REF: p. 38

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing

**Concam Inc.** manufactures television sets. Last month, direct materials (e.g., electronic components) costing \$500,000 were put into production. Direct labour of \$800,000 was incurred, overhead equalled \$450,000, and selling and administrative costs totalled \$360,000. The company manufactured 8,000 television sets during the month. Assume the company had no beginning or ending work-in-process balances.

32. Refer to **Concam Inc.** What were the total product costs last month?
- a. \$1,250,000
  - b. \$1,300,000
  - c. \$1,750,000
  - d. \$2,110,000

ANS: C

SUPPORTING CALCULATIONS:

$$\$500,000 + \$800,000 + \$450,000$$

PTS: 1                      DIF: Easy                  REF: p. 38

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing



33. Refer to **Concam Inc.** What was the total per-unit prime cost last month?
- a. \$62.50
  - b. \$156.25
  - c. \$162.50
  - d. \$263.75

ANS: C

SUPPORTING CALCULATIONS:

$$(\$500,000 + \$800,000)/8,000$$

PTS: 1

DIF: Easy

REF: p. 38

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing

34. Refer to **Concam Inc.** What was the per-unit conversion cost last month?
- a. \$100.00
  - b. \$156.25
  - c. \$162.50
  - d. \$218.75

ANS: B

SUPPORTING CALCULATIONS:

$$(\$800,000 + \$450,000)/8,000$$

PTS: 1

DIF: Easy

REF: p.39

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; implementing

35. Refer to **Concam Inc.** What was the amount of cost of goods manufactured last month?
- a. \$1,250,000
  - b. \$1,300,000
  - c. \$1,750,000
  - d. \$2,110,000

ANS: C

SUPPORTING CALCULATIONS:

$$\$500,000 + \$800,000 + \$450,000$$

PTS: 1

DIF: Medium

REF: p. 44

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; implementing

**Lonborg Co.** had the following beginning and ending inventory balances for the year ended December 31, 20x8:

	<u>January 1, 20x8</u>	<u>December 31, 20x8</u>
Materials	\$10,000	\$ 8,000
Work in Process	\$18,000	\$17,000
Finished Goods	\$21,000	\$16,500

In addition, direct labour costs of \$30,000 were incurred, overhead equalled \$42,000, materials purchased were \$27,000, and selling and administrative costs were \$22,000. Lonborg Co. sold 25,000 units of product during the year at a sales price of \$5.00 per unit.

36. Refer to **Lonborg Co.** What were the total manufacturing costs for the year?
- \$101,000
  - \$102,000
  - \$106,500
  - \$123,000

ANS: A

SUPPORTING CALCULATIONS:

Materials used in production	\$ 29,000
Direct labour	30,000
Overhead	<u>42,000</u>
Total manufacturing costs	\$101,000

PTS: 1                      DIF: Medium                      REF: p. 38                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; executing

37. Refer to **Lonborg Co.** What was the amount of Cost of Goods Manufactured for the year?
- \$100,000
  - \$101,000
  - \$102,000
  - \$124,000

ANS: C

SUPPORTING CALCULATIONS:

Materials 1/1	\$10,000
Purchases	<u>27,000</u>
	37,000
Materials 12/31	<u>(8,000)</u>
Materials used	29,000
Direct labour	30,000
Overhead	<u>42,000</u>
Total manufacturing costs	101,000
Work in process 1/1	18,000
Work in process 12/31	<u>(17,000)</u>
Cost of goods manufactured	\$102,000

PTS: 1                      DIF: Medium                      REF: p. 44                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; executing

38. Refer to **Lonborg Co.** What was the amount of cost of goods sold for the year?
- \$97,500
  - \$102,000
  - \$106,500
  - \$128,500

ANS: C

SUPPORTING CALCULATIONS:

Cost of Goods Manufactured	\$102,000
Finished Goods Inventory 1/1	21,000
Finished Goods Inventory 12/31	<u>(16,500)</u>
Cost of Goods Sold	\$106,500

PTS: 1                    DIF: Challenging    REF: p.44                    OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

39. Refer to **Lonborg Co.** What was Lonborg's operating income or loss for the year?
- \$(3,500)
  - \$5,500
  - \$18,500
  - \$125,000

ANS: A

SUPPORTING CALCULATIONS:

Sales	\$125,000
Cost of goods sold	<u>106,500</u>
Gross margin	18,500
Selling & administrative	<u>22,000</u>
Operating income	(3,500)

PTS: 1                    DIF: Challenging    REF: p. 48                    OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

**Junko Company** makes financial calculators. During the year Junko manufactured 97,000 financial calculators. Finished goods inventory had the following units on hand:

January 1	1,260
December 31	1,040

40. Refer to **Junko Company.** How many financial calculators did Junko sell during the year?
- 96,780
  - 97,000
  - 97,220
  - 98,260

ANS: C

SUPPORTING CALCULATIONS:

Units manufactured	97,000
Decrease in inventory balances	<u>220</u>
Units sold	97,220

PTS: 1                    DIF: Challenging    REF: p. 38                    OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; implementing

41. Refer to **Junko Company**. Suppose each financial calculator had a per-unit product cost of \$112. What would be the cost of finished goods inventory on December 31?
- \$24,640
  - \$116,480
  - \$124,640
  - \$141,120

ANS: B

SUPPORTING CALCULATIONS:

$$1,040 \times \$112 = \$116,480$$

PTS: 1                      DIF: Easy                      REF: p. 44                      OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; executing

42. Refer to **Junko Company**. Suppose each financial calculator has a per-unit product cost of \$112. What would be the cost of goods sold last year?
- \$10,839,360
  - \$10,864,000
  - \$10,888,640
  - \$11,005,120

ANS: C

SUPPORTING CALCULATIONS:

$$97,220 \times \$112 = \$10,888,640$$

PTS: 1                      DIF: Medium                      REF: p. 44                      OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order, implementing

Last year **Quest Company** incurred the following costs:

Direct materials	\$40,000
Direct labour	60,000
Overhead	90,000
Selling expenses	24,000
Administrative expenses	22,000

Quest produced and sold 2,000 units at a sales price of \$125 each. Assume that beginning and ending inventories of materials, work in process, and finished goods were zero.

43. Refer to **Quest Company**. What was Quest's total period expense?
- \$24,000
  - \$46,000
  - \$190,000
  - \$250,000

ANS: B

SUPPORTING CALCULATIONS:

$$\$24,000 + \$22,000 = \$46,000$$

PTS: 1                      DIF: Easy                      REF: p. 38                      OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics      MSC: Higher order; classifying

44. Refer to **Quest Company**. What were the total product costs?
- \$100,000
  - \$150,000
  - \$190,000
  - \$236,000

ANS: C

SUPPORTING CALCULATIONS:

$$\$40,000 + \$60,000 + \$90,000 = \$190,000$$

PTS: 1                      DIF: Medium                      REF: p. 38

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; implementing

45. Refer to **Quest Company**. What was the conversion cost per unit?
- \$50
  - \$75
  - \$95
  - \$125

ANS: B

SUPPORTING CALCULATIONS:

$$(\$60,000 + \$90,000)/2,000 = \$75$$

PTS: 1                      DIF: Medium                      REF: p. 39

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing

46. Refer to **Quest Company**. What was the gross margin per unit?
- \$7
  - \$30
  - \$95
  - \$125

ANS: B

SUPPORTING CALCULATIONS:

Sales (2000 × \$125)	\$250,000
Cost of goods sold	<u>190,000</u>
Gross margin	\$ 60,000/2,000 units = \$30

PTS: 1                      DIF: Medium                      REF: p. 48

OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; implementing

47. A company's beginning work-in-process inventory is \$120,000, its ending work-in-process inventory is \$160,000, its cost of goods manufactured is \$400,000, and its direct materials used are \$100,000. What are the conversion costs?
- \$140,000
  - \$280,000
  - \$300,000
  - \$340,000

ANS: D

SUPPORTING CALCULATIONS:

$$\$400,000 + \$160,000 - \$120,000 - \$100,000 = \$340,000$$

PTS: 1                      DIF: Challenging                      REF: p.39

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; implementing

48. Information from the records of Cain Corporation for December is as follows:
- |                                     |  |             |
|-------------------------------------|--|-------------|
| Sales                               |  | \$1,230,000 |
| Selling and administrative expenses |  | 210,000     |
| Direct materials used               |  | 264,000     |
| Direct labour                       |  | 300,000     |
| Factory overhead                    |  | 405,000     |

	<u>Inventories</u>	
	<u>Dec. 1</u>	<u>Dec. 31</u>
Direct materials	\$36,000	\$42,000
Work in process	75,000	84,000
Finished goods	69,000	57,000

What are the conversion costs?

- \$564,000
- \$705,000
- \$960,000
- \$1,179,000

ANS: B

SUPPORTING CALCULATIONS:

$$\$300,000 + \$405,000 = \$705,000$$

PTS: 1                      DIF: Medium                      REF: p. 39  
 NAT: AACSB Analytic | IMA-Business Economics

OBJ: 2.2  
 MSC: Higher order; implementing

49. Information from the records of Cain Corporation for December is as follows:
- |                                     |  |             |
|-------------------------------------|--|-------------|
| Sales                               |  | \$1,230,000 |
| Selling and administrative expenses |  | 210,000     |
| Direct materials used               |  | 264,000     |
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	<u>Inventories</u>	
	<u>Dec. 1</u>	<u>Dec. 31</u>
Direct materials	\$36,000	\$42,000
Work in process	75,000	84,000
Finished goods	69,000	57,000

What are the prime costs?

- \$564,000
- \$705,000
- \$960,000
- \$969,000

ANS: B

SUPPORTING CALCULATIONS:

$$\$264,000 + \$300,000 = \$564,000$$

PTS: 1                      DIF: Medium                      REF: p. 39  
 NAT: AACSB Analytic | IMA-Business Economics

OBJ: 2.2  
 MSC: Higher order; executing

**Gateway Company** produces a product with the following per-unit costs:

Direct materials	\$11
Direct labour	8
Overhead	15

Last year, Gateway produced and sold 750 units at a sales price of \$68 each. Total selling and administrative expense was \$22,000.

50. Refer to **Gateway Company**. What was the prime cost per unit?
- a. \$11
  - b. \$19
  - c. \$23
  - d. \$34

ANS: B

SUPPORTING CALCULATIONS:

$$\$11 + \$8 = \$19$$

PTS: 1                      DIF: Easy                      REF: p. 39                      OBJ: 2.2  
NAT: AACSB Analytic | IMA-Business Economics                      MSC: Higher order; executing

51. Refer to **Gateway Company**. What was the cost of goods sold last year?
- a. \$14,250
  - b. \$25,500
  - c. \$47,500
  - d. \$51,000

ANS: B

SUPPORTING CALCULATIONS:

$$750 \times \$34$$

PTS: 1                      DIF: Medium                      REF: p. 47                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; implementing

52. Refer to **Gateway Company**. What was the total operating income last year?
- a. \$3,500
  - b. \$25,500
  - c. \$29,000
  - d. \$51,000

ANS: A

SUPPORTING CALCULATIONS:

Sales	\$51,000
Cost of goods sold	(25,500)
Sell and admin.	<u>(22,000)</u>
Operating income	3,500

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; implementing

53. What is the definition of the cost of goods manufactured?
- the cost of direct materials used in production
  - the product cost of goods completed during the current period
  - the product cost of goods sold during the current period
  - the cost remaining in ending work-in-process inventory

ANS: B                      PTS: 1                      DIF: Challenging      REF: p. 41  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; classifying

54. How is the cost of goods manufactured calculated?
- total product costs incurred during the current period + beginning work in process – ending work in process
  - direct materials cost + direct labour cost + overhead cost
  - sales – cost of goods sold
  - gross margin – other expenses

ANS: A                      PTS: 1                      DIF: Challenging      REF: p. 41  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; differentiating

55. What is the term for the cost of the partially completed goods at the end of the period?
- the beginning work-in-process inventory
  - the cost of goods manufactured
  - the ending work-in-process inventory
  - the ending finished goods inventory

ANS: C                      PTS: 1                      DIF: Medium              REF: p. 42  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; classifying

56. When are product costs expensed?
- when the product is finished
  - when the product unit cost is calculated
  - when the product is sold
  - when the product begins production

ANS: C                      PTS: 1                      DIF: Challenging      REF: p. 42  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics  
MSC: Higher order; exemplifying

57. Which of the following would be found on the balance sheet of a manufacturer and not on the balance sheet of a service business?
- cost of goods manufactured
  - work in process
  - cost of goods sold
  - gross profit

ANS: A                      PTS: 1                      DIF: Medium              REF: p. 42  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; comparing



58. Assuming a separate schedule of cost of goods manufactured, which of the following is found on a manufacturer's income statement?
- cost of goods sold
  - work in process
  - direct materials
  - direct labour

ANS: A                      PTS: 1                      DIF: Medium                      REF: p. 43  
 OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; exemplifying

59. Which of the following would be found on the balance sheet of a manufacturer?
- cost of goods sold
  - cost of goods manufactured
  - work in progress inventory
  - revenue

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 43  
 OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; classifying

60. During the month of June, Telecom Inc. had cost of goods manufactured of \$112,000, direct materials cost of \$52,000, direct labour cost of \$37,000, and overhead cost of \$26,000. The work-in-process balance at June 30 equalled \$10,000. What was the work-in-process balance on June 1?
- \$7,000
  - \$10,000
  - \$13,000
  - \$115,000

ANS: A

SUPPORTING CALCULATIONS:

Direct materials	\$ 52,000
Direct labour	37,000
Overhead	<u>26,000</u>
Total manufacturing costs	115,000
Work in process 6/1	7,000
Work in process 6/30	<u>(10,000)</u>
Cost of goods manufactured	\$112,000

PTS: 1                      DIF: Medium                      REF: p. 44                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; executing

61. Kutlow, Inc., had cost of goods sold of \$112,000 for the year ended December 31, 20x1. The finished goods inventory on January 1, 20x1, was \$28,000, and the finished goods inventory on December 31, 20x8, was \$17,000. What was the amount of cost of goods manufactured for the year?
- \$67,000
  - \$101,000
  - \$113,000
  - \$129,000

ANS: B

SUPPORTING CALCULATIONS:

Finished Goods 1/1	\$ 28,000
Cost of Goods Manufactured	<u>101,000</u>
Goods Available	129,000
Finished Goods 12/31	<u>(17,000)</u>
Cost of Goods Sold	\$112,000

PTS: 1                      DIF: Medium              REF: p.44              OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; implementing

62. Andover, Inc. had a gross margin for the month of February totalling \$42,000. The company sold 5,000 units during the month at a sales price of \$20 per unit. What was the amount of cost of goods sold for the month?
- \$42,000
  - \$58,000
  - \$100,000
  - \$158,000

ANS: B

SUPPORTING CALCULATIONS:

Sales (5,000 × \$20)	\$100,000
Cost of Goods Sold	<u>58,000</u>
Gross Margin	42,000

PTS: 1                      DIF: Easy                      REF: p. 44              OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; implementing

In July, **Econo Company** purchased materials costing \$21,000 and incurred direct labour cost of \$18,000. Overhead totalled \$32,000 for the month. Information on inventories was as follows:

	<u>July 1</u>	<u>July 31</u>
Materials	\$6,200	\$7,100
Work in process	\$ 700	\$1,200
Finished goods	\$3,300	\$2,700

63. Refer to **Econo Company**. What were the total manufacturing costs in July?
- \$50,000
  - \$69,600
  - \$70,100
  - \$71,000

ANS: C

SUPPORTING CALCULATIONS:

Materials used	\$20,100
Direct Labour	18,000
Overhead	<u>32,000</u>
Total manufacturing costs	\$70,100

PTS: 1                      DIF: Medium                      REF: p. 44

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; executing

64. Refer to **Econo Company**. What was the cost of goods manufactured for July?
- \$69,100
  - \$69,600
  - \$70,500
  - \$70,700

ANS: B

SUPPORTING CALCULATIONS:

Total manufacturing costs	\$70,100
Work in Process 7/1	700
Work in Process 7/31	<u>(1,200)</u>
Cost of Goods Manufactured	\$69,600

PTS: 1                      DIF: Medium                      REF: p. 44

OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics

MSC: Higher order; implementing

65. Refer to **Econo Company**. What was the cost of goods sold for July?
- \$69,600
  - \$70,200
  - \$71,100
  - \$71,300

ANS: B

SUPPORTING CALCULATIONS:

Cost of Goods Manufactured	\$69,600
Finished Goods 7/1	3,300
Finished Goods 7/31	<u>(2,700)</u>
Cost of Goods Sold	\$70,200

PTS: 1                      DIF: Medium              REF: p. 44                      OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics                      MSC: Higher order; implementing

66. Refer to **Econo Company**. What was the cost of direct materials used in July?
- \$20,100
  - \$20,500
  - \$21,000
  - \$21,900

ANS: A

SUPPORTING CALCULATIONS:

Materials 7/1	\$ 6,200
Purchases	21,000
Materials 7/31	<u>(7,100)</u>
Materials used	\$20,100

PTS: 1                      DIF: Medium              REF: p. 45                      OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics                      MSC: Higher order; implementing

67. Refer to **Econo Company**. Suppose Econo Company sold 10,000 units during July and gross margin totalled \$29,800. What would be the sales price per unit?
- \$9.94
  - \$10.00
  - \$10.09
  - \$10.11

ANS: B

SUPPORTING CALCULATIONS:

Gross margin	\$ 29,800
Cost of Goods Sold	<u>70,200</u>
Sales (10,000 × \$?)	100,000
Sales Price per unit	\$ 10

PTS: 1                      DIF: Medium              REF: p. 48                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Business Economics                      MSC: Higher order; implementing

**Seaview Company** took the following data from their income statement at the end of the current year.

Per-unit product cost:	\$30
Gross margin percentage:	40%
Selling and administrative expenses	\$30,000
Operating Income	\$10,000

68. Refer to **Seaview Company**. What was the cost of goods sold for the year?
- a. \$40,000
  - b. \$50,000
  - c. \$60,000
  - d. \$100,000

ANS: C

SUPPORTING CALCULATIONS:

Sales ( $\$40,000/0.40$ )	\$100,000
Gross margin	<u>(40,000)</u>
Cost of goods sold	60,000

Also  $\$40,000/0.40 \times 0.60$

PTS: 1                      DIF: Challenging      REF: p. 44                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; implementing

69. Refer to **Seaview Company**. What was the gross margin for the year?
- a. \$40,000
  - b. \$50,000
  - c. \$60,000
  - d. \$100,000

ANS: A

SUPPORTING CALCULATIONS:

Operating Income	\$10,000
Selling and Administrative	<u>\$30,000</u>
Gross Margin	\$40,000

PTS: 1                      DIF: Challenging      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; implementing

70. Refer to **Seaview Company**. How many units were sold during the year?
- a. 1,000
  - b. 1,500
  - c. 2,000
  - d. 3,333

ANS: C

SUPPORTING CALCULATIONS:

Cost of goods Sold  $\$60,000/\$30 = 2,000$  units

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; implementing

71. Refer to **Seaview Company**. What was the sales price per unit?
- \$10
  - \$20
  - \$30
  - \$50

ANS: D

SUPPORTING CALCULATIONS:

Sales \$100,000/2,000 units = \$50

PTS: 1                    DIF: Medium            REF: p. 48            OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; implementing

72. During the month of January, Enterprise, Inc. had total manufacturing costs of \$110,000 and incurred \$40,000 in direct labour costs and \$30,000 in overhead costs. The materials inventory on January 1 was \$3,000 less than the materials inventory on January 31. What was the cost of materials purchased during the month?
- \$37,000
  - \$40,000
  - \$43,000
  - \$45,000

ANS: C

SUPPORTING CALCULATIONS:

Direct materials used	\$ 40,000
Direct labour	\$ 40,000
Overhead	<u>\$ 30,000</u>
Total manufacturing costs	\$110,000
Direct materials purchased	\$ 43,000
Difference in inventory balances	<u>(3,000)</u>
Direct materials used	\$ 40,000

PTS: 1                    DIF: Challenging    REF: p. 45            OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics    MSC: Higher order; executing

73. Talcum, Inc. had materials inventory at July 1 of \$12,000. The materials inventory at July 31 was \$15,000, and the cost of direct materials used in production was \$20,000. What was the cost of materials purchased during the month?
- \$17,000
  - \$20,000
  - \$23,000
  - \$35,000

ANS: C

SUPPORTING CALCULATIONS:

Materials inventory 7/1	\$12,000
Purchases	<u>23,000</u>
Available	35,000
Materials inventory 7/31	<u>15,000</u>
Materials used in production	20,000

PTS: 1                    DIF: Medium            REF: p.45            OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; implementing

74. Selected data concerning the past year's operations of the Burner Corporation are as follows:

Selling and administrative expenses	\$225,000
Direct materials used	397,500
Direct labour	450,000

	<u>Inventories</u>	
	<u>Dec. 1</u>	<u>Dec. 31</u>
Direct materials	\$36,000	\$42,000
Work in process	75,000	84,000
Finished goods	69,000	57,000

What is the cost of direct materials purchased?

- a. \$367,500
- b. \$397,500
- c. \$403,500
- d. \$405,000

ANS: C

SUPPORTING CALCULATIONS:

$$\$397,500 + \$42,000 - \$36,000 = \$403,500$$

PTS: 1                      DIF: Medium                      REF: p. 45                      OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics                      MSC: Higher order; implementing

75. Which of the following is characteristic of cost of goods sold?
- a. Cost of goods sold is the total product cost for the units sold during a period.
  - b. Cost of goods sold is the total product cost on the on the balance sheet.
  - c. Cost of goods sold is a cost that will be more than the revenue.
  - d. Cost of goods sold does not include the direct materials cost of the product.

ANS: A                      PTS: 1                      DIF: Challenging                      REF: p. 46  
 OBJ: 2.3                      NAT: AACSB Analytic                      MSC: Higher order; classifying

76. How many inventory accounts does a typical manufacturer have?
- a. 1
  - b. 2
  - c. 3
  - d. 4

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 47  
 OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; exemplifying

77. Which statement is true for the income statement of a manufacturer?
- a. It will show the ending balance of work in process.
  - b. It contains only manufacturing costs.
  - c. It will show the ending balance of materials inventory.
  - d. It covers a certain period of time.

ANS: D                      PTS: 1                      DIF: Challenging                      REF: p. 47  
 OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; classifying

78. What three categories separate the expenses on a manufacturer's income statement?
- production, period, and indirect
  - materials, work in process, and finished goods
  - production, selling, and administrative
  - variable, fixed, and direct

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 47  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; classifying

79. What is the formula to calculate gross margin?
- sales revenue – selling and administrative expenses
  - sales revenue – cost of goods sold
  - cost of goods manufactured + beginning finished goods inventory – ending finished goods inventory
  - total product costs + beginning work in process – ending work in process

ANS: B                      PTS: 1                      DIF: Medium                      REF: p. 48  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; classifying

80. What is the formula to calculate operating income?
- sales revenue – cost of goods sold – selling and administrative expenses
  - gross margin – selling expenses
  - sales revenue – cost of goods sold
  - sales revenue – selling and administrative expenses

ANS: A                      PTS: 1                      DIF: Medium                      REF: p.48  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; classifying



81. Information from the records of Place, Inc., for December is as follows:

Sales	\$820,000
Selling and administrative expenses	140,000
Direct materials purchases	176,000
Direct labour	200,000
Factory overhead	270,000
Direct materials, December 1	24,000
Work in process, December 1	50,000
Finished goods, December 1	46,000
Direct materials, December 31	28,000
Work in process, December 31	56,000
Finished goods, December 31	38,000

What is the net income for the month of December?

- a. \$36,000
- b. \$180,000
- c. \$636,000
- d. \$644,000

ANS: A

SUPPORTING CALCULATIONS:

$$\text{COGM} = (\$24,000 + \$176,000 - \$28,000) + \$200,000 + \$270,000 + \$50,000 - \$56,000 = \$636,000$$

$$\text{COGS} = \$636,000 + \$46,000 - \$38,000 = \$644,000$$

$$\text{NI} = \$820,000 - \$140,000 - \$644,000 = \$36,000$$

PTS: 1                      DIF: Challenging      REF: p. 48  
NAT: AACSB Analytic | IMA-Business Economics

OBJ: 2.3  
MSC: Higher order; executing

82. What is the formula to calculate gross margin percent?

- a. gross margin/cost of goods sold
- b. operating income/sales revenue
- c. gross margin/sales revenue
- d. sales revenue/gross margin

ANS: C                      PTS: 1                      DIF: Medium                      REF: p. 49  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting      MSC: Higher order; classifying

**Bartlow, Inc.** had the following income statement for the month of May.

Sales revenue	\$428,000
Cost of goods sold	<u>205,440</u>
Gross margin	222,560
Less:	
Selling expenses	81,320
Administrative expenses	<u>72,760</u>
Operating income	\$ 68,480

83. Refer to **Bartlow Inc.** What was the sales revenue percent?
- a. 16%
  - b. 48%
  - c. 52%
  - d. 100%

ANS: D

SUPPORTING CALCULATIONS:

$$\$428,000/\$428,000 = 100\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

84. Refer to **Bartlow Inc.** What was the cost of goods sold percent?
- a. 19%
  - b. 48%
  - c. 52%
  - d. 100%

ANS: B

SUPPORTING CALCULATIONS:

$$\$205,440/\$428,000 = 48\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

85. Refer to **Bartlow Inc.** What was the gross margin percent?
- a. 17%
  - b. 19%
  - c. 48%
  - d. 52%

ANS: D

SUPPORTING CALCULATIONS:

$$\$222,560/\$428,000 = 52\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

86. Refer to **Bartlow Inc.** What was the selling expense percent?

- a. 17%
- b. 19%
- c. 16%
- d. 21%

ANS: B

SUPPORTING CALCULATIONS:

$$\$81,320/\$428,000 = 19\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

87. Refer to **Bartlow Inc.** What was the administrative expense percent?

- a. 15%
- b. 16%
- c. 17%
- d. 19%

ANS: C

SUPPORTING CALCULATIONS:

$$\$72,760/\$428,000 = 17\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

88. Refer to **Bartlow Inc.** What was the operating income percent?

- a. 15%
- b. 16%
- c. 17%
- d. 19%

ANS: B

SUPPORTING CALCULATIONS:

$$\$68,480/\$428,000 = 16\%$$

PTS: 1                    DIF: Easy                    REF: p. 49                    OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; executing

89. Which of the following would **NOT** be found on the income statement of a service organization?

- a. selling expenses
- b. gross margin
- c. operating income
- d. cost of goods sold

ANS: D                    PTS: 1                    DIF: Medium                    REF: p. 51

OBJ: 2.3                    NAT: AACSB Analytic | IMA-Reporting    MSC: Higher order; exemplifying

90. Which of the following can be found on the income statements of both a manufacturer and a service organization?
- cash
  - accumulated amortization
  - cost of goods sold
  - administrative expenses

ANS: D                      PTS: 1                      DIF: Medium                      REF: p. 51  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting                      MSC: Higher order; exemplifying

### TRUE/FALSE

1. Cost is a dollar measure of the resources used to achieve a given benefit.

ANS: T                      PTS: 1                      DIF: Medium                      REF: p.30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

2. Expired costs are called assets.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p.30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

3. Reducing the cost required to achieve a given benefit means that a company is becoming less efficient.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

4. Costs are incurred to produce future benefits.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

5. As costs are used up in the production of revenues, they are said to expire. Expired costs are called assets.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

6. The revenue per unit is called price.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

7. Price must be greater than cost in order for the firm to generate revenue.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

8. Accumulating costs is the way that costs are measured and recorded.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 30  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

9. A cost object is something for which a company wants to know the cost.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p.31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

10. Costs can be assigned to cost objects in a number of ways.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 32  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

11. Assigning costs involves the way that a cost is linked to some cost object.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

12. Assigning costs tells the accountant who spent the money.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

13. A cost object is any item, such as products, customers, departments, regions, and so on, for which costs are measured and assigned.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 31  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

14. It is **NOT** necessary to assign indirect costs to cost objects.

ANS: F                      PTS: 1                      DIF: Medium                      REF: p. 32  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

15. Costs are directly, **NOT** indirectly, associated with cost objects.

ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 32  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

16. Direct costs are those costs that can be easily and accurately traced to a cost object.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 32  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics

17. Indirect costs are costs that are **NOT** easily and accurately traced to a cost object.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 32  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Cost Management

18. Direct materials can be directly traced to the goods or services being produced.

ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 33  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics

19. Allocation means that an indirect cost is assigned to a cost object using a reasonable and convenient method.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 33  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics
20. Property taxes on a factory building would normally be classified as a variable cost.
- ANS: F                      PTS: 1                      DIF: Medium                      REF: p.34  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
21. Glue used in the manufacture of cabinets is an example of a variable cost.
- ANS: T                      PTS: 1                      DIF: Medium                      REF: p.34  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
22. A variable cost is one that increases in total as output increases and decreases in total as output decreases.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 34  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics
23. A fixed cost is a cost that does **NOT** increase in total as output increases and does **NOT** decrease in total as output decreases.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 34  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics
24. An opportunity cost is the benefit given up or sacrificed when one alternative is chosen over another.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 34  
OBJ: 2.1                      NAT: AACSB Analytic | IMA-Business Economics
25. Industries that provide intangible services do **NOT** normally have direct contact with their customers.
- ANS: F                      PTS: 1                      DIF: Challenging                      REF: p. 35  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
26. All product costs other than direct materials and indirect labour are called overhead.
- ANS: F                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
27. All manufacturing costs are classified as direct materials, direct labour, or overhead.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
28. Product costs are carried in inventory until the goods are finished.
- ANS: F                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics

29. For external reporting purposes, product costs must be classified into only three categories.
- ANS: T                      PTS: 1                      DIF: Medium                      REF: p. 36  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
30. Employees who convert direct materials into a product or who provide a service to customers are classified as direct labour.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
31. Prime cost is the sum of indirect materials and indirect labour.
- ANS: F                      PTS: 1                      DIF: Easy                      REF: p.37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
32. The cost of janitorial services for a factory building would be classified as direct labour.
- ANS: F                      PTS: 1                      DIF: Medium                      REF: p. 37  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
33. Period costs are those costs associated with the manufacture of goods or the providing of services.
- ANS: F                      PTS: 1                      DIF: Medium                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
34. Any costs associated with storing, selling, and delivering a product are classified as period costs.
- ANS: T                      PTS: 1                      DIF: Medium                      REF: p. 38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
35. Research and development costs would be classified as nonproduction costs.
- ANS: T                      PTS: 1                      DIF: Medium                      REF: p. 39  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
36. Production costs include direct materials, direct labour, and selling costs.
- ANS: F                      PTS: 1                      DIF: Easy                      REF: p. 39  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
37. Marketing costs would be classified as period costs.
- ANS: T                      PTS: 1                      DIF: Easy                      REF: p. 39  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
38. Cost of goods manufactured represents the cost of direct materials, direct labour, and overhead incurred during the current accounting period.
- ANS: F                      PTS: 1                      DIF: Challenging                      REF: p. 43  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting





Select the appropriate definition for each of the items listed below.

- |                     |                  |
|---------------------|------------------|
| a. Period cost      | e. Indirect cost |
| b. Direct cost      | f. Fixed cost    |
| c. Opportunity cost | g. Product cost  |
| d. Variable cost    |                  |
- 
9. A benefit given up when one alternative is chosen over another
  10. A cost that stays the same in total regardless of changes in output
  11. A cost that is difficult to trace to a cost object
  12. A manufacturing cost
  13. A cost that is not inventoried
  14. A cost that can be easily traced to a cost object
  15. A cost that increases in total as output increases
- 
- |            |  |           |                 |
|------------|--|-----------|-----------------|
| 9. ANS: C  | PTS: 1                                       | DIF: Easy | REF: p.35-40    |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 10. ANS: F | PTS: 1                                       | DIF: Easy | REF: p.35 – 40  |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 11. ANS: E | PTS: 1                                       | DIF: Easy | REF: p.35 – 40  |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 12. ANS: G | PTS: 1                                       | DIF: Easy | REF: p.35 – 40  |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 13. ANS: A | PTS: 1                                       | DIF: Easy | REF: p.35 – 40  |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 14. ANS: B | PTS: 1                                       | DIF: Easy | REF: p.35 – 40  |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 15. ANS: D | PTS: 1                                       | DIF: Easy | REF: p. 35 – 40 |
| OBJ: 2.2   | NAT: AACSB Analytic   IMA-Business Economics |           |                 |

Select the appropriate classification for each of the following costs.

a. Period

b. Product

- 16. Advertising costs
- 17. Cost accountant's salary
- 18. Factory supervisor's salary
- 19. Research and development costs
- 20. Marketing costs
- 21. Cost of shipping products to customers
- 22. Supplies for factory washroom
- 23. Assembly line worker's wages

- |     |          |  |           |                 |
|-----|----------|--|-----------|-----------------|
| 16. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 17. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 18. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 19. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 20. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 21. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 22. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 23. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |

Select the appropriate classification for each of the costs incurred by a manufacturer of automobiles.

- a. Direct materials
- b. Direct labour
- c. Overhead
- d. Selling expense
- e. Administrative expense

- 24. Cost of tires
- 25. Factory supplies
- 26. General accounting costs
- 27. Factory security costs
- 28. Factory janitorial costs
- 29. Salary of chief executive officer
- 30. Depreciation of vehicles used by sales personnel
- 31. Cost of windshields used in the production process

- |     |          |  |           |                 |
|-----|----------|--|-----------|-----------------|
| 24. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 25. | ANS: C   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 26. | ANS: E   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 27. | ANS: C   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 28. | ANS: C   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 29. | ANS: E   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 30. | ANS: D   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 31. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |

Select the appropriate classification for each of the items listed below.

a. Product cost

b. Period cost

32. Cost of nails used by a home builder
33. Fees paid to an advertising firm
34. Sugar used in soft drink production
35. Rental cost of executive Lear jet
36. Cost of conference for sales team
37. Factory supervisor's salary
38. Fees paid to outside auditing firm
39. Factory security costs

- |     |          |  |           |                 |
|-----|----------|--|-----------|-----------------|
| 32. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 33. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 34. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 35. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 36. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 37. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 38. | ANS: B   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |
| 39. | ANS: A   | PTS: 1                                       | DIF: Easy | REF: p. 37 – 38 |
|     | OBJ: 2.2 | NAT: AACSB Analytic   IMA-Business Economics |           |                 |

Select the appropriate classification of the items listed below.

- a. Selling expense
- b. Administrative expense
- c. Direct materials
- d. Direct labour
- e. Overhead

- 40. Chief of surgery's salary at a hospital
- 41. Wages of assembly line workers in an automobile plant
- 42. Cost of lubricating factory machinery
- 43. Cost of shipping goods to customers
- 44. Glue used in the manufacture of furniture
- 45. Cost of engines in the manufacture of airplanes
- 46. Salary of chief executive officer
- 47. A professor's salary at a university

- 40. ANS: D                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 41. ANS: D                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 42. ANS: E                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 43. ANS: A                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 44. ANS: E                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 45. ANS: C                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 46. ANS: B                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 47. ANS: D                      PTS: 1                      DIF: Easy                      REF: p.38  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics

Select the appropriate definition for each of the items listed below.

- a. Per-unit prime cost
- b. Per-unit conversion cost
- c. Per-unit cost of goods manufactured

- 48.  $(\text{direct labour} + \text{overhead}) / \text{units produced}$
- 49.  $(\text{total manufacturing costs} + \text{work in process beginning} - \text{work in process ending}) / \text{units produced}$
- 50.  $(\text{direct materials} + \text{direct labour}) / \text{units produced}$

- 48. ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 39 – 44  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 49. ANS: C                      PTS: 1                      DIF: Easy                      REF: p. 39 – 44  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics
- 50. ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 39 – 44  
OBJ: 2.2                      NAT: AACSB Analytic | IMA-Business Economics

Select the appropriate item for each of the definitions listed below.

- a. Gross margin
- b. Selling expenses
- c. Sales revenue
- d. Cost of goods sold
- e. Operating income

- 51. Gross margin – period costs
- 52. Marketing and distributing costs
- 53. Number of units sold multiplied by sales price per unit
- 54. Sales – cost of goods sold
- 55. Number of units sold multiplied by product cost per unit

- 51. ANS: E                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting
- 52. ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting
- 53. ANS: C                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting
- 54. ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting
- 55. ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.3                      NAT: AACSB Analytic | IMA-Reporting

Select the appropriate definition for each of the items listed below.

- a. Work-in-process inventory
- b. Finished goods inventory
- c. Cost of goods sold
- d. Cost of goods manufactured
- e. Total manufacturing costs

- 56. The cost of units finished but not sold at the end of the current period
- 57. Direct materials + direct labour + overhead
- 58. The cost of units unfinished at the end of the current period
- 59. Product cost per-unit × units sold
- 60. (direct materials + direct labour + overhead) +/- the change in work-in-process inventory from the beginning to the end of the current period

- 56. ANS: B                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.2 | 2.3                      NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
- 57. ANS: E                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.2 | 2.3                      NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
- 58. ANS: A                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.2 | 2.3                      NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
- 59. ANS: C                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.2 | 2.3                      NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
- 60. ANS: D                      PTS: 1                      DIF: Easy                      REF: p. 44  
OBJ: 2.2 | 2.3                      NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting

*Select the appropriate definition of each of the items listed below.*

- a. Income statement
- b. Cost of goods manufactured
- c. Work in process
- d. Gross margin
- e. Operating income

- 61. Gross margin – selling and administrative expenses
- 62. The difference between sales revenue and cost of goods sold
- 63. The total cost of goods completed during the current period
- 64. Covers a particular period of time
- 65. Cost of partially completed goods

- |     |          |                                     |           |            |
|-----|----------|-------------------------------------|-----------|------------|
| 61. | ANS: E   | PTS: 1                              | DIF: Easy | REF: p. 44 |
|     | OBJ: 2.3 | NAT: AACSB Analytic   IMA-Reporting |           |            |
| 62. | ANS: D   | PTS: 1                              | DIF: Easy | REF: p. 44 |
|     | OBJ: 2.3 | NAT: AACSB Analytic   IMA-Reporting |           |            |
| 63. | ANS: B   | PTS: 1                              | DIF: Easy | REF: p. 44 |
|     | OBJ: 2.3 | NAT: AACSB Analytic   IMA-Reporting |           |            |
| 64. | ANS: A   | PTS: 1                              | DIF: Easy | REF: p. 44 |
|     | OBJ: 2.3 | NAT: AACSB Analytic   IMA-Reporting |           |            |
| 65. | ANS: C   | PTS: 1                              | DIF: Easy | REF: p. 44 |
|     | OBJ: 2.3 | NAT: AACSB Analytic   IMA-Reporting |           |            |

**PROBLEM**

1. Ashland Company, maker of kitchen cabinets, incurred the following costs during the current year:

**Required:** Classify each cost as either a product or period cost.

	Product	Period
1. Depreciation on automobiles used by the sales staff.		
2. Salary of Ashland's chief executive officer		
3. Glue used in the production process		
4. Supplies for factory washroom		
5. Research and development costs		
6. Property taxes on factory building		
7. Salary of company controller		
8. Depreciation on furniture in factory lunchroom		
9. Cost of lubricating machinery		
10. Wood used in production process		

ANS:

	Product	Period
1. Depreciation on automobiles used by the sales staff.		X
2. Salary of Ashland's chief executive officer		X
3. Glue used in the production process	X	
4. Supplies for factory washroom	X	
5. Research and development costs		X
6. Property taxes on factory building	X	
7. Salary of company controller		X
8. Depreciation on furniture in factory lunchroom	X	
9. Cost of lubricating machinery	X	
10. Wood used in production process	X	

PTS: 1                      DIF: Medium                      REF: p. 37 – 38                      OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics



2. Arcadia Company, which manufactures recreational vehicles, incurred the following costs during the current year.

**Required:** Classify each cost using the table format given below:

		Product Cost			Period Cost	
		Direct Materials	Direct Labour	Overhead	Selling Expense	Administrative Expense
1.	Wages of general office personnel					
2.	Cost of tires					
3.	Factory supervisor's salary					
4.	Conference for marketing personnel					
5.	Factory security guards					
6.	Research and development					
7.	Assembly line workers					
8.	Company receptionist					
9.	Advertising cost					
10.	Cost of shipping vehicles to customers					

ANS:

		Product Cost			Period Cost	
		Direct Materials	Direct Labour	Overhead	Selling Expense	Administrative Expense
1.	Wages of general office personnel					X
2.	Cost of tires	X				
3.	Factory supervisor's salary			X		
4.	Conference for marketing personnel				X	
5.	Factory security guards			X		
6.	Research and development					X
7.	Assembly line workers		X			

8.	Company receptionist				X
9.	Advertising cost			X	
10.	Cost of shipping vehicles to customers			X	

PTS: 1                    DIF: Medium                    REF: p. 37 – 38                    OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics

3. The Bayou Company makes crab pots. During the current month, direct materials costing \$126,000 were put into production. Direct labour of \$78,000 was incurred and overhead equalled \$84,000. Selling and administrative expenses totalled \$66,000 for the month, and the company manufactured 3,000 crab pots. Assume there was no beginning inventory and that 2,800 crab pots were sold.

**Required:**

- A. Compute the per-unit product cost.
- B. Compute the per-unit prime cost.
- C. Compute the per-unit conversion cost.
- D. What is cost of goods sold for the month?
- E. What is the cost of ending finished goods for the month?

ANS:

- A.  $(\$126,000 + \$78,000 + \$84,000)/3,000 = \$96$
- B.  $(\$126,000 + \$78,000)/3,000 = \$68$
- C.  $(\$78,000 + \$84,000)/3,000 = \$54$
- D.  $(\$96 \times 2,800) = \$268,800$
- E.  $(\$96 \times 200) = \$19,200$

PTS: 1                    DIF: Medium                    REF: p. 39 – 44                    OBJ: 2.2  
 NAT: AACSB Analytic | IMA-Business Economics

4. The Blanchett Company manufactures fishing rods. Last year, direct materials costing \$516,000 were put into production. Direct labour of \$430,000 was incurred, and overhead equalled \$645,000. The company had operating income for the year of \$58,000 and manufactured and sold 86,000 fishing rods at a sales price of \$21 per unit. Assume that there were no beginning or ending inventory balances in the work in process and finished goods inventory accounts.

**Required:**

- A. Compute the per-unit product cost.
- B. Compute the per-unit prime cost.
- C. Compute the per-unit conversion cost.
- D. Compute the gross margin for the year.
- E. Compute the selling and administrative expenses for the year.
- F. Assume production amounted to 86,000 fishing rods and 80,000 were sold. Compute cost of goods sold.
- G. Assume production amounted to 86,000 fishing rods and 80,000 were sold. Compute the balance in ending finished goods inventory.

ANS:

A.  $(\$516,000 + \$430,000 + \$645,000)/86,000 = \$18.50$

B.  $(\$516,000 + \$430,000)/86,000 = \$11.00$

C.  $(\$430,000 + \$645,000)/86,000 = \$12.50$

D.	Sales (86,000 × \$21)	\$1,806,000
	COGS (86,000 × \$18.50)	<u>1,591,000</u>
	Gross margin	215,000

E.	Gross margin	\$ 215,000
	Less: sell and admin.	<u>157,000</u>
	Operating income	58,000

F.  $(80,000 \times \$18.50) = \$1,480,000$

G.  $(6,000 \times \$18.50) = \$111,000$

PTS: 1                      DIF: Medium                      REF: p.39 – 44                      OBJ: 2.2 | 2.3

NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting

5. Tucker Company, a manufacturing firm, has supplied the following information from its accounting records for the month of April.

Direct labour cost	\$12,000
Purchases of raw materials	17,000
Factory insurance	4,000
Research and development	7,500
Factory property taxes	3,000
Sales commissions paid	4,500
Work in process, April 1	2,000
Work in process, April 30	2,800
Materials inventory, April 1	1,475
Materials Inventory, April 30	1,200
Finished goods inventory, April 1	2,250
Finished goods inventory, April 30	750

**Required:** Prepare a statement of cost of goods manufactured

ANS:

Tucker Company  
Statement of Cost of Goods Manufactured  
For the month ended April 30

Materials inventory, April 1	\$ 1,475	
Materials purchased	<u>17,000</u>	
Materials available for use	18,475	
Materials inventory, April 30	<u>1,200</u>	
Materials used		\$17,275
Direct labour		12,000
Overhead		<u>7,000</u>
Total manufacturing costs		36,275
Work in process, April 1		2,000
Work in process, April 30		<u>(2,800)</u>
Cost of goods manufactured		\$35,475

PTS: 1                      DIF: Medium                      REF: p.44                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

6. In June, Olympic Company purchased materials costing \$38,000, and incurred direct labour costs of \$42,000. Overhead totalled \$27,000 for the month. Information on inventories was as follows.

	<u>June 1</u>	<u>June 30</u>
Materials	\$3,000	\$2,700
Work in process	1,000	1,275
Finished goods	2,500	1,775

**Required:**

- A. Calculate the cost of direct materials used during June.
- B. Calculate the total manufacturing cost for June.
- C. Calculate the cost of goods manufactured for June.
- D. Calculate cost of goods sold for June.

ANS:

A.	Materials, 6/1	\$ 3,000
	Purchases	38,000
	Materials, 6/30	<u>(2,700)</u>
	Materials used	\$ 38,300
B.	(\$38,300 + \$42,000 + \$27,000) = \$107,300	
C.	Total manufacturing costs	\$107,300
	Work in process, 6/1	1,000
	Work in process, 6/30	<u>(1,275)</u>
	Cost of goods manufactured	\$107,025
D.	Cost of goods manufactured	\$107,025
	Finished goods, 6/1	2,500
	Finished goods, 6/30	<u>(1,775)</u>
	Cost of goods sold	\$107,750

PTS: 1                      DIF: Medium                      REF: p. 44                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

7. Templar Company, a manufacturing firm, has supplied the following information from its accounting records for the month of November:

Factory supplies used	\$18,000
Depreciation on factory building	17,000
Salary of company controller	6,000
Factory janitorial costs	5,000
Marketing and promotion	4,500
Direct labour cost	22,000
Purchases of raw materials	10,000
Finished goods inventory, Nov. 1	2,250
Finished goods inventory, Nov. 30	3,750
Work-in-process inventory, Nov. 1	4,200
Work-in-process inventory, Nov. 30	2,750
Materials inventory, Nov. 1	3,500
Materials inventory, Nov. 30	5,100

**Required:**

- A. Prepare a statement of cost of goods manufactured  
 B. Prepare a statement of cost of goods sold

ANS:

Templar Company  
 Statement of Cost of Goods Manufactured  
 For the month of November

Materials inventory, Nov. 1	\$ 3,500	
Purchases of materials	10,000	
Materials inventory, Nov. 30	<u>(5,100)</u>	
Materials used		\$ 8,400
Direct labour		22,000
Overhead		<u>40,000</u>
Total manufacturing costs		70,400
Work-in-process inventory, Nov. 1		4,200
Work-in-process inventory, Nov. 30		<u>(2,750)</u>
Cost of goods manufactured		\$71,850

Templar Company  
 Statement of Cost of Goods Sold  
 For the month of November

Cost of goods manufactured	\$71,850
Finished goods inventory, Nov. 1	2,250
Finished goods inventory, Nov. 30	<u>(3,750)</u>
Cost of goods sold	\$70,350

PTS: 1            DIF: Medium            REF: p. 44            OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

8. The Butchart Company manufactures microwave ovens. Last year, the per-unit product cost was \$56, the per-unit prime cost was \$34, and the per-unit conversion cost was \$42. Cost of goods sold for the year was \$560,000, and the sale price per unit was \$100. In addition, direct labour costs of \$200,000 and selling and administrative expenses of \$240,000 were incurred.

**Required:**

- A. Calculate how many units were sold last year.
- B. Compute the cost of direct materials used.
- C. Compute the cost of overhead.
- D. Compute the gross margin for the year.
- E. Calculate operating income.

**ANS:**

A. Cost of goods sold  $\$560,000 / \$56 = 10,000$  units

B.  $10,000 \times \$34 - (\$200,000 \text{ of direct labour cost}) = \$140,000$

C.  $10,000 \times \$42 - (\$200,000 \text{ of direct labour cost}) = \$220,000$

D.	Sales revenue (10,000 × \$100)	\$1,000,000
	Cost of goods sold	<u>560,000</u>
	Gross margin	440,000

E.	Gross margin	\$ 440,000
	Less: sell and admin.	<u>240,000</u>
	Operating income	200,000

PTS: 1                    DIF: Challenging    REF: p.44 – 48            OBJ: 2.2 | 2.3  
 NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting

9. Fidalgo Company makes stereos. During the year, Fidalgo manufactured and sold 75,000 stereos at a sales price of \$575 per unit. Fidalgo's per-unit product cost was \$540 and selling and administrative expenses totalled \$2,000,000.

**Required:**

- A. Compute the total sales revenue.  
 B. Compute the gross margin.  
 C. Compute the operating income.  
 D. Compute the operating income if 75,000 stereos were produced and 69,000 were sold.

ANS:

A.  $75,000 \times \$575 = \$43,125,000$

B.	Sales revenue	\$43,125,000
	Cost of goods sold	
	(75,000 × \$540)	<u>40,500,000</u>
	Gross margin	2,625,000

C.	Gross margin	\$ 2,625,000
	Selling and adm. expenses	<u>2,000,000</u>
	Operating income	625,000

D.	Sales revenue	\$39,675,000
	Cost of goods sold	
	(69,000 × \$540)	<u>37,260,000</u>
	Gross margin	2,415,000
	Selling and adm. expenses	<u>2,000,000</u>
	Operating income	415,000

PTS: 1                    DIF: Medium                    REF: p. 48                    OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting



10. Baleen Company supplied the following data at the end of the current year:

Sales commissions	\$ 12,000
Sales revenue	120,000
Research and development	17,000
Finished goods inventory, Jan. 1	7,500
Work-in-process inventory, Jan 1	9,000
Finished goods inventory, Dec. 31	6,000
Work-in-process inventory, Dec. 31	11,000
Cost of goods manufactured	52,000

**Required:** Prepare an income statement for Baleen company.

ANS:

Baleen Company Income Statement For the year ended December 31, 20xx	
Sales revenue	\$120,000
Cost of goods sold*	<u>53,500</u>
Gross margin	66,500
Less:	
Selling expense	12,000
Administrative expense	<u>17,000</u>
Operating income	\$ 37,500
 *Cost of goods manufactured	 \$ 52,000
Finished goods inventory, Jan. 1	7,500
Finished Goods inventory, Dec. 31	(6,000)

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

11. Macon Company supplied the following data and information on inventories at the end of the current year.

	<u>January 1</u>	<u>December 31</u>
Materials	\$21,000	\$23,500
Work in process	17,500	8,500
Finished goods	26,000	27,000
Direct labour		\$ 40,000
Selling expenses		31,000
Sales revenue		400,000
Administrative expenses		14,500
Purchases of raw materials		62,000
Factory supervision		50,000
Factory supplies used		25,000

**Required:** Prepare an income statement of Macon Company for the current year

ANS:

Macon Company  
Income Statement  
For the year ended December 31, 20xx

Sales revenue	\$ 400,000
Cost of goods sold*	<u>182,500</u>
Gross margin	217,500
Less:	
Selling expenses	31,000
Administrative expenses	<u>14,500</u>
Operating income	\$172,000
 *Cost of goods manufactured**	 \$183,500
Finished goods inventory, Jan. 1	26,000
Finished goods inventory, Dec. 31	<u>(27,000)</u>
Cost of goods sold	182,500
 **Purchases of raw materials	 \$ 62,000
Materials inventory, 1/1	21,000
Materials inventory, 12/31	<u>(23,500)</u>
Materials used	59,500
Direct labour	40,000
Overhead (\$50,000 + \$25,000)	<u>75,000</u>
Total manufacturing costs	174,500
Work-in-process inventory, Jan. 1	17,500
Work-in-process inventory, Dec. 31	<u>(8,500)</u>
Cost of goods manufactured	\$183,500

PTS: 1                      DIF: Challenging      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

12. Bartlow Company has supplied the following information from its accounting records for the month of May.

Direct labour cost	\$11,500
Purchases of raw materials	20,000
Factory depreciation	7,500
Advertising	10,000
Factory property taxes	6,500
Materials inventory, 5/1	1,250
Materials inventory, 5/31	2,500
Work-in-process inventory, 5/1	?
Work-in-process inventory, 5/31	1,500
Cost of goods manufactured	45,850
Sales revenue	?
Executive salary cost	25,000
Finished goods inventory, 5/1	5,500
Finished goods inventory, 5/31	4,250
Operating income	67,900
Gross margin	?

**Required:** Solve for the missing amounts (?).

ANS:

Bartlow Company  
Schedule of Cost of Goods Manufactured  
For the month of May

Materials inventory, 5/1	\$ 1,250
Purchases of materials	20,000
Materials inventory, 5/31	<u>(2,500)</u>
Materials used	\$18,750
Direct labour	11,500
Overhead (7,500 + 6,500)	<u>14,000</u>
Total manufacturing costs	44,250
Work in process, 5/1	3,100
Work in process, 5/31	<u>(1,500)</u>
Cost of goods manufactured	\$45,850

Bartlow Company  
Income Statement  
For the month of May

Sales revenue	\$150,000
Cost of goods sold*	<u>47,100</u>
Gross margin	102,900
Less:	
Selling expense	10,000
Administrative expense	<u>25,000</u>
Operating income	\$ 67,900
*Cost of goods manufactured	\$ 45,850
Finished goods inventory, 5/1	5,500
Finished goods inventory, 5/31	<u>(4,250)</u>
Cost of goods sold	\$ 47,100

PTS: 1                    DIF: Challenging    REF: p. 48  
 NAT: AACSB Analytic | IMA-Reporting

OBJ: 2.3

13. See the following separate cases.

	<u>Case #1</u>	<u>Case #2</u>
Sales	\$1,000	\$1,300
Cost of goods manufactured	A	500
Finished goods inventory (beginning balance)	100	D
Finished goods inventory (ending balance)	150	200
Cost of goods sold	B	600
Gross margin	300	E
Selling expenses	C	75
Administrative expenses	50	40
Operating income	200	F

**Required:** Solve for the missing amounts (A, B, C, D, E, and F).

ANS:

	<u>Case #1</u>	<u>Case #2</u>
Sales	<u>\$1,000</u>	<u>\$1,300</u>
Cost of goods manufactured	750	500
Finished goods inventory (beginning balance)	<u>100</u>	<u>300</u>
Finished goods inventory (ending balance)	(150)	(200)
Cost of goods sold	<u>700</u>	<u>600</u>
Gross margin	300	700
Selling expenses	50	75
Administrative expenses	<u>50</u>	<u>40</u>
Operating income	200	585

PTS: 1                    DIF: Medium            REF: p. 48  
 NAT: AACSB Analytic | IMA-Reporting

OBJ: 2.3

14. See the following separate cases.

	<u>Case #1</u>	<u>Case #2</u>
Purchase of materials	\$ 5,000	C
Materials inventory (beginning balance)	A	220
Materials inventory (ending balance)	1,000	350
Direct labour	7,000	4,250
Factory supervision	1,500	1,100
Factory supplies	1,250	900
Total manufacturing costs	14,500	D
Work-in-process inventory (beginning balance)	1,200	1,230
Work-in-process inventory (ending balance)	B	650
Cost of goods manufactured	14,600	10,200

**Required:** Solve for the missing amounts (A,B,C, and D).

ANS:

	<u>Case #1</u>	<u>Case #2</u>
Purchases of materials	\$ 5,000	\$ 3,500
Materials inventory (beginning balance)	750	220
Materials inventory (ending balance)	<u>(1,000)</u>	<u>(350)</u>
Materials used	4,750	3,370
Direct labour	7,000	4,250
Overhead	<u>2,750</u>	<u>2,000</u>
Total manufacturing costs	14,500	9,620
Work-in-process inventory, (beginning balance)	1,200	1,230
Work-in-process inventory, (ending balance)	<u>(1,100)</u>	<u>(650)</u>
Cost of goods manufactured	\$14,600	\$10,200

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

15. Rizzuto Company supplied the following information for the month of January.

Cost of goods sold percent	62%
Selling expense percent	6%
Administrative expense	13%

**Required:** Reconstruct Rizzuto's Income Statement for January assuming that their total sales revenue for the month equalled \$500,000.

ANS:

Rizzuto Company Income Statement For the month of January	
Sales revenue	\$500,000
Cost of goods sold ( $500,000 \times 62\%$ )	<u>310,000</u>
Gross margin ( $500,000 \times 38\%$ )	190,000
Less:	
Selling expense ( $500,000 \times 6\%$ )	30,000
Administrative expense ( $500,000 \times 13\%$ )	<u>65,000</u>
Operating income	95,000

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

16. Rancor Company's accountant prepared the following Income Statement for the month of August.

Rancor Company  
Income Statement  
For the month of August

Sales revenue	\$912,200
Cost of goods sold	<u>601,920</u>
Gross margin	310,080
Less:	
Selling expense	164,160
Administrative expense	<u>63,840</u>
Operating income	\$ 82,080

**Required:**

- A. Calculate the sales revenue percent
- B. Calculate the cost of goods sold percent
- C. Calculate the gross margin percent
- D. Calculate the selling expense percent
- E. Calculate the administrative expense percent
- F. Calculate the operating income percent

ANS:

- A.  $912,000/912,000 = 100\%$
- B.  $601,920/912,000 = 66\%$
- C.  $310,080/912,000 = 34\%$
- D.  $164,160/912,000 = 18\%$
- E.  $63,840/912,000 = 7\%$
- F.  $82,080/912,000 = 9\%$

PTS: 1                      DIF: Easy                      REF: p. 49                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

17. Extrema Company supplied the following data at the end of the current year.

Finished goods inventory, Jan 1.	\$ 12,000
Finished goods inventory, Dec. 31	7,500
Cost of goods manufactured	152,380
Sales revenue	212,000
Sales commissions	19,080
Research and development costs	15,900

**Required:**

- A. Calculate the cost of goods sold percent
- B. Calculate the gross margin percent
- C. Calculate the selling expense percent
- D. Calculate the administrative expense percent
- E. Calculate the operating income percent

ANS:

A.	Cost of goods manufactured	\$152,380
	Finished goods inventory, 1/1	12,000
	Finished goods inventory, 12/31	<u>(7,500)</u>
	Cost of goods sold	156,880
	 Sales revenue	 \$212,000
	Cost of goods sold	<u>156,880</u>
	Gross margin	55,120
	Less:	
	Selling expense	19,080
	Administrative expense	<u>15,900</u>
	Operating income	\$ 20,140

- A.  $156,880/212,000 = 74\%$
- B.  $55,120/212,000 = 26\%$
- C.  $19,080/212,000 = 9\%$
- D.  $15,900/212,000 = 7.5\%$
- E.  $20,140/212,000 = 9.5\%$

PTS: 1                      DIF: Medium                      REF: p. 49                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting



18. Cashman Company supplied the following information for the month of December.

Operating income percent	10.5%
Gross margin percent	30%

**Required:** Solve for the following amounts assuming that Cashman Company's operating income in December was \$44,100.

- A. Sales revenue
- B. Cost of goods sold
- C. Total selling and administrative expenses

ANS:

A.	Sales revenue = $\$44,100 / .105 = 420,000$	
B.	Cost of goods sold = $420,000 \times .70 = \$294,000$	
C.	Gross margin ( $420,000 \times .30$ )	126,000
	Less: selling and administrative exp.	<u>81,900</u>
	Operating income	44,100

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

19. Wapato Company produces a product with the following per unit costs.

Direct materials	\$17
Direct labour	11
Overhead	12

Last year, Wapato produced and sold 3,000 units at a sales price of \$80 each. Total selling and administrative expenses were \$25,000.

**Required:** Solve for the following:

- A. Total cost of goods sold for last year
- B. Operating income for last year
- C. Total gross margin for last year
- D. Prime cost per unit

ANS:

A.	$(17 + 11 + 12) \times 3,000 = \$120,000$	
B. & C.	Sales revenue ( $3,000 \times 80$ )	\$240,000
	Cost of goods sold	<u>120,000</u>
	Gross margin	120,000
	Less:	
	Selling and administrative expenses	<u>25,000</u>
	Operating income	\$ 95,000
D.	$17 + 11 = \$28$	

PTS: 1                      DIF: Easy                      REF: p. 48                      OBJ: 2.3  
 NAT: AACSB Analytic | IMA-Reporting

20. Tesco Company showed the following costs for last month.

Direct materials	\$40,000
Direct labour	35,000
Overhead	52,000
Selling expense	17,000
Administrative expense	12,000

Last month, Tesco produced and sold 20,000 units at a sales price per unit of \$18. Assume no beginning or ending inventory balances for work in process and finished goods inventory.

**Required:** Solve for the following amounts.

- A. Total product cost for last month
- B. Unit product cost for last month
- C. Total period costs
- D. Gross margin for last month
- E. Operating income for last month

ANS:

A.  $40,000 + 35,000 + 52,000 = \$127,000$

B.  $127,000/20,000 = \$6.35$

C.  $17,000 + 12,000 = \$29,000$

D & E.	Sales revenue (20,000 × \$18)	360,000
	Cost of goods sold	<u>127,000</u>
	Gross margin	233,000
	Less:	
	Selling expense	17,000
	Administrative expense	<u>12,000</u>
	Operating income	\$204,000

PTS: 1                      DIF: Medium                      REF: p. 48                      OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

## ESSAY

1. What is the difference between a period cost and a product cost?

ANS:

A period cost is a non-manufacturing cost that is expensed during the current period rather than inventoried. Examples of period costs would be selling and administrative costs. A product cost is a manufacturing cost that is inventoried and expensed as cost of goods sold only when the goods have been sold. Product costs are classified as direct materials, direct labour, or overhead.

PTS: 1                      DIF: Medium                      REF: p. 37                      OBJ: 2.2  
NAT: AACSB Analytic | IMA-Business Economics

2. Describe the purpose of the three inventory accounts used by a manufacturer.

ANS:

The materials inventory is used to keep track of materials that have not yet been used in production. The work-in-process inventory is used to account for the costs of goods that were partially completed at the end of the accounting period. The finished goods inventory is used to account for the cost of goods that were finished at the end of the current period but have not yet been sold.

PTS: 1                      DIF: Medium              REF: p. 38              OBJ: 2.2 | 2.3  
NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting

3. List and describe the three categories of manufacturing costs.

ANS:

Direct materials consist of the cost of materials requisitioned and used in production during the current period. Direct materials are materials that can be accurately and conveniently traced to the product. Direct labour consists of labour costs of workers directly involved in the manufacture of the product. Overhead consists of all the manufacturing costs that do not fall into the direct material or direct labour category. Examples of overhead costs include insurance on the factory, machinery depreciation, indirect labour, indirect materials, factory supplies, etc.

PTS: 1                      DIF: Medium              REF: p. 38              OBJ: 2.2  
NAT: AACSB Analytic | IMA-Business Economics

4. What is the difference between total manufacturing costs and cost of goods manufactured?

ANS:

Total manufacturing costs would consist of the cost of materials used, the direct labour costs incurred and the overhead costs incurred during the current period. Cost of goods manufactured would be computed by adding the beginning balance of work in process to and subtracting the ending balance of work in process from the total manufacturing costs.

PTS: 1                      DIF: Medium              REF: p. 38 – 44              OBJ: 2.3  
NAT: AACSB Analytic | IMA-Reporting

5. Explain the difference between an inventoriable cost and a non-inventoriable cost.

ANS:

An inventoriable cost is a cost of manufacturing the product. Inventoriable costs are also referred to as product costs and manufacturing costs. They include direct materials, direct labour, and overhead. Inventoriable costs are not expensed until the goods are sold. A non-inventoriable cost is a selling or administrative cost that is expensed immediately in the accounting period that it is incurred. Non-inventoriable costs are also referred to as period costs or non-manufacturing costs.

PTS: 1                      DIF: Medium              REF: p. 37 – 38              OBJ: 2.2  
NAT: AACSB Analytic | IMA-Business Economics