

## Chapter 2-Basic Managerial Accounting Concepts

## TRUE/FALSE

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

ANS: T DIF: Medium OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
2. Expired costs are called assets.

ANS: F DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
3. A cost object is something for which a company wants to know the cost.
ANS: T
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic | IMA-Business Economics
4. Costs can be assigned to cost objects in a number of ways.
ANS: T
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic | IMA-Business Economics
5. It is not necessary to assign indirect costs to cost objects.

ANS: F DIF: Medium OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
6. Property taxes on a factory building would normally be classified as a variable cost.

ANS: F DIF: Medium OBJ: 2.2
NAT: AACSB Analytic|IMA-Business Economics
7. Glue used in the manufacture of cabinets would be an example of a variable cost.

ANS: T DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
8. Industries that provide intangible services do not normally have direct contact with their customers.

ANS: F DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
9. Period costs are those costs associated with the manufacture of goods or the providing of services.

ANS: F DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
10. Research and development costs would be classified as non-production costs.

ANS: T DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
11. Production costs include direct materials, direct labor, and selling costs.

ANS: F DIF: Easy OBJ: 2.2
NAT: AACSB Analytic |IMA-Business Economics
12. Employees who convert direct materials into a product or who provide a service to customers are classified as direct labor.

ANS: T DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
13. All product costs other than direct materials and indirect labor are called overhead.

ANS: F DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
14. All manufacturing costs are classified as direct materials, direct labor, or overhead.

ANS: T DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
15. Any costs associated with storing, selling, and delivering the product are classified as period costs.

ANS: T DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
16. Prime cost is the sum of indirect materials and indirect labor.

ANS: F DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
17. Product costs are carried in inventory until the goods are finished.

ANS: F DIF: Medium OBJ: 2.2
NAT: AACSB Analytic |IMA-Business Economics
18. Marketing costs would be classified as period costs.

ANS: T DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
19. Cost of goods manufactured represents the cost of direct materials, direct labor, and overhead incurred during the current accounting period.

ANS: F DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
20. Cost of goods sold is the total product cost of the units sold during a period.

ANS: T DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
21. Sales revenue equals the product cost per unit times the number of units sold.

ANS: F DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
22. For external reporting purposes, product costs must be classified into only three categories.

ANS: T DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
23. Gross margin equals operating income.

ANS: F DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
24. Direct materials can be directly traced to the goods or services being produced.

ANS: T DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
25. The cost of janitorial services for a factory building would be classified as direct labor.

ANS: F DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
26. Reducing the cost required to achieve a given benefit means that a company is becoming less efficient.

ANS: F DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
27. Costs are incurred to produce future benefits.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic|IMA-Business Economics
28. As costs are used up in the production of revenues, they are said to expire. Expired costs are called assets.

ANS: F DIF: Easy OBJ: 2.1
NAT: AACSB Analytic |IMA-Business Economics
29. The revenue per unit is called price.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
30. Price must be greater than cost in order for the firm to generate revenue.

ANS: F DIF: Easy OBJ: 2.1

NAT: AACSB Analytic | IMA-Business Economics
31. Accumulating costs is the way that costs are measured and recorded.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic |IMA-Business Economics
32. Assigning costs involves the way that a cost is linked to some cost object.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic|IMA-Business Economics
33. Assigning costs tells the accountant who spent the money.

ANS: F DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
34. A cost object is any item such as products, customers, departments, regions, and so on, for which costs are measured and assigned.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
35. Costs are directly, not indirectly, associated with cost objects.

ANS: F DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
36. Direct costs are those costs that can be easily and accurately traced to a cost object.
ANS: T
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic |IMA-Business Economics
37. Indirect costs are costs that are not easily and accurately traced to a cost object.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Cost Management
38. Allocation means that an indirect cost is assigned to a cost object using a reasonable and convenient method.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
39. A variable cost is one that increases in total as output increases and decreases in total as output decreases.

ANS: T DIF: Easy OBJ: 2.1
NAT: AACSB Analytic|IMA-Business Economics
40. 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 DIF: Easy OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
41. An opportunity cost is the benefit given up or sacrificed when one alternative is chosen over another.
ANS: T
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic | IMA-Business Economics

## MULTIPLE CHOICE

1. Expired costs are called
a. assets
b. expenses
c. revenues
d. profit

ANS: B DIF: Easy OBJ: 2.1
NAT: AACSB Analytic|IMA-Business Economics
2. Non-manufacturing costs include
a. marketing and administration
b. direct materials
c. indirect materials
d. overhead

ANS: A
DIF: Easy
OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
3. Assigning costs to cost objects
a. provides information for decision making.
b. can be accomplished in a number of ways.
c. can be a simple or complex process.
d. do all of these.

ANS: D DIF: Medium OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
4. An indirect cost
a. can be easily and accurately traced to a cost object.
b. is hard to trace.
c. should never be assigned to a cost object.
d. do none of these.

ANS: B DIF: Medium OBJ: 2.1
NAT: AACSB Analytic | IMA-Business Economics
5. A variable cost in total
a. increases as output increases
b. remains constant at all levels of output
c. is the benefit given up when one alternative is chosen over another
d. decreases as output increases

ANS: A DIF: Medium OBJ: 2.1
NAT: AACSB Analytic |IMA-Business Economics
6. Which of the following is an example of an intangible product?
a. hamburgers
b. computers
c. automobiles
d. dental care

ANS: D
DIF: Easy
OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
7. Which of the following is an example of a tangible product?
a. funeral care
b. legal services
c. furniture
d. video rental
ANS: C
DIF: Easy
OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
8. Costs are subdivided into what two major functional categories?
a. production and non-production
b. selling and administrative
c. prime and conversion
d. opportunity and direct

ANS: A DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
9. Product costs
a. are inventoriable costs.
b. are manufacturing costs.
c. include direct materials, direct labor, and overhead.
d. are all of these.

ANS: D DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
10. Which of the following would not be a period cost?
a. salary of chief executive officer
b. indirect labor
c. advertising costs
d. depreciation on office building

ANS: B DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
11. Which of the following would be an example of a direct materials cost?
a. windshield on a new automobile
b. nails used to construct a new house
c. glue used to build cabinets
d. solder used to manufacture televisions

ANS: A DIF: Medium OBJ: 2.2
NAT: AACSB Analytic|IMA-Business Economics
12. Production costs consist of
a. period costs
b. indirect materials, indirect labor, and administrative costs
c. direct materials, direct labor, and selling costs
d. direct materials, direct labor, and overhead

ANS: D DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
13. Which of the following is not an example of a direct materials cost?
a. wood in a dining room table
b. engine in an airplane
c. glue used to manufacture furniture
d. CD player in a new car

ANS: C DIF: Medium OBJ: 2.2
NAT: AACSB Analytic |IMA-Business Economics
14. Materials in the raw materials account do not become direct materials
a. until they are withdrawn from inventory for use in production.
b. until the finished product is sold.
c. until they are purchased from a vendor.
d. none of these are correct.

ANS: A DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
15. Which of the following is an example of direct labor?
a. chef in a restaurant
b. janitor in a production plant
c. security guard for the factory
d. management accountant

ANS: A DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
16. Direct labor is a
a. non-production cost.
b. period cost.
c. nonmanufacturing cost.
d. product cost.

ANS: D DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
17. Overhead includes
a. indirect labor.
b. indirect materials.
c. supplies.
d. all of these.
ANS: D
DIF: Easy
OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
18. Which of the following would not be included in overhead?
a. marketing costs
b. property taxes on the factory
c. factory utility costs
d. deprecation on factory machinery

ANS: A DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
19. Indirect labor would include
a. salary of the vice-president of marketing
b. salary of CEO
c. salary of factory supervisor
d. none of these

ANS: C DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
20. The unit cost
a. is the total product costs divided by the number of units produced
b. includes period costs
c. is the total prime costs divided by the number of units produced
d. is the total conversion costs divided by the number of units produced

ANS: A DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
21. Prime cost is
a. indirect materials cost and indirect labor cost
b. direct materials cost and direct labor cost
c. direct labor cost and overhead cost
d. selling cost and administrative cost

ANS: B DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
22. Conversion cost is the sum of
a. direct materials cost and direct labor cost
b. indirect labor cost and overhead cost
c. product costs and period costs
d. direct labor cost and overhead cost

ANS: D DIF: Easy OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
23. Period costs
a. are selling costs and administrative costs
b. are used to compute product cost
c. can be included in overhead costs
d. are carried in inventory until the goods are sold

ANS: A DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
24. Which of the following is an example of a period cost?
a. research and development
b. selling and marketing
c. general accounting
d. all of these

ANS: D DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
25. Cost of goods manufactured equals
a. the cost of direct materials used in production
b. the product cost of goods completed during the current period
c. the product cost of goods sold during the current period
d. the cost remaining in ending work in process inventory

ANS: B DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
26. Cost of goods manufactured equals
a. total product costs incurred during the current period + beginning work in process ending work in process
b. direct materials cost + direct labor cost + overhead cost
c. sales - cost of goods sold
d. none of these

ANS: A DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic|IMA-Reporting
27. The cost of the partially completed goods at the end of the period would be
a. beginning work in process inventory
b. cost of goods manufactured
c. ending work in process inventory
d. ending finished goods inventory

ANS: C DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
28. Product costs are expensed
a. when the product is finished
b. when the product unit cost is calculated
c. when the product is sold
d. all of these

ANS: C DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic|IMA-Business Economics
29. Cost of goods sold
a. is the total product cost for the units sold during a period
b. is found on the Income Statement
c. can be a lesser amount than cost of goods manufactured
d. all of these
ANS: D
DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic
30. Which of the following would not be found on the Income Statement of a manufacturer?
a. cost of goods sold
b. work in process
c. cost of goods manufactured
d. selling and administrative costs

ANS: B
Assume a separate schedule of Cost of Goods Manufactured.

## DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting

31. Which of the following would not be found on the Balance Sheet of a manufacturer?
a. cost of goods manufactured
b. work in process
c. finished goods
d. raw materials

ANS: A DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
32. Which of the following would be found on the Balance Sheet of a manufacturer?
a. cost of goods sold
b. cost of goods manufactured
c. factory building
d. all of these

ANS: C DIF: Medium OBJ: 2.3
NAT: AACSB Analytic |IMA-Reporting
33. Gross margin equals
a. sales revenue - selling and administrative expenses
b. sales revenue - cost of goods sold
c. cost of goods manufactured + beginning finished goods inventory - ending finished goods inventory
d. total product costs + beginning work in process - ending work in process

ANS: B DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
34. Operating income equals
a. sales revenue - cost of goods sold - selling and administrative expenses
b. gross margin - selling expenses
c. sales revenue - cost of goods sold
d. sales revenue - selling and administrative expenses

ANS: A DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
35. Gross margin percent equals
a. gross margin/cost of goods sold
b. operating income/sales revenue
c. gross margin/sales revenue
d. sales revenue/gross margin

ANS: C DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
36. Which of the following would not be found on an Income Statement of a service organization?
a. selling expenses
b. gross margin
c. operating income
d. All of these can be found on the Income Statement of a service organization.

ANS: D DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
37. Which of the following can be found on the Income Statements of both a manufacturing and service organization?
a. gross margin
b. operating income
c. administrative expenses
d. all of these can be found on both.

ANS: D DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
38. A manufacturer normally has
a. three inventory accounts
b. two inventory accounts
c. four inventory accounts
d. none of these

ANS: A DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
39. An Income Statement of a manufacturer
a. will show the ending balance of work in process
b. contains only manufacturing costs
c. will show the ending balance of materials inventory
d. covers a certain period of time

ANS: D DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
40. On a manufacturer's Income Statement expenses are separated into the following three categories:
a. production, period, and indirect
b. materials, work in process, and finished goods
c. production, selling, and administrative
d. variable, fixed, and direct

ANS: C DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting

Figure 2-1.
Concam Inc. manufactures television sets. Last month direct materials (electronic components, etc.) costing $\$ 500,000$ were put into production. Direct labor of $\$ 800,000$ was incurred, overhead equaled $\$ 450,000$, and selling and administrative costs totaled $\$ 360,000$. The company manufactured 8,000 television sets during the month. Assume that there were no beginning or ending work in process balances.
41. Refer to Figure 2-1. The per-unit conversion cost was:
a. $\$ 218.75$
b. $\$ 156.25$
c. $\$ 162.50$
d. $\$ 100.00$

ANS: B
SUPPORTING CALCULATIONS:
(\$800,000 + \$450,000)/8,000
DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
42. Refer to Figure 2-1. The total product costs for last month were:
a. $\$ 1,750,000$
b. $\$ 2,110,000$
c. $\$ 1,300,000$
d. $\$ 1,250,000$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 500,000+\$ 800,000+\$ 450,000$
DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
43. Refer to Figure 2-1. The total per unit prime cost was:
a. $\$ 263.75$
b. $\$ 62.50$
c. $\$ 162.50$
d. $\$ 156.25$

ANS: C
SUPPORTING CALCULATIONS:
(\$500,000 + \$800,000)/8,000
DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
44. Refer to Figure 2-1. What was the amount of cost of goods manufactured last month?
a. $\$ 1,750,000$
b. $\$ 1,250,000$
c. $\$ 1,300,000$
d. $\$ 2,110,000$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 500,000+\$ 800,000+\$ 450,000$
DIF: Medium OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics

Figure 2-2.
Lonborg Co. had the following beginning and ending inventory balances for the year ended December 31, 20x8:

Materials
Work in Process
Finished Goods

| January 1, 20x8 | December 31, 20x8 |  |
| :---: | :---: | :---: |
|  | $\$ 10,000$ | $\$ 8,000$ |
| $\$ 18,000$ | $\$ 17,000$ |  |
| $\$ 21,000$ | $\$ 16,500$ |  |

In addition, direct labor costs of $\$ 30,000$ were incurred, overhead equaled $\$ 42,000$, 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.
45. Refer to Figure 2-2. What was the amount of Cost of Goods Manufactured for the year?
a. $\$ 101,000$
b. $\$ 124,000$
c. $\$ 100,000$
d. $\$ 102,000$

ANS: D
SUPPORTING CALCULATIONS:

| Materials 1/1 | \$10,000 |  |
| :---: | :---: | :---: |
| Purchases | 27,000 |  |
|  | 37,000 |  |
| Materials 12/31 | <8,000> |  |
| Materials used |  | 29,000 |
| Direct Labor |  | 30,000 |
| Overhead |  | 42,000 |
| Total manufacturing costs |  | 101,000 |
| Work in Process 1/1 |  | 18,000 |
| Work in Process 12/31 |  | <17,000> |
| Cost of Goods Manufactured |  | \$102,000 |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
46. Refer to Figure 2-2. What was the amount of Cost of Goods Sold for the year?
a. $\$ 102,000$
b. $\$ 97,500$
c. $\$ 106,500$
d. $\$ 128,500$

ANS: C
SUPPORTING CALCULATIONS:

Cost of Goods Manufactured
Finished Goods Inventory 1/1
Finished Goods Inventory 12/31
Cost of Goods Sold
DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
47. Refer to Figure 2-2. What were the total manufacturing costs for the year?
a. $\$ 101,000$
b. $\$ 102,000$
c. $\$ 123,000$
d. $\$ 106,500$

ANS: A

## SUPPORTING CALCULATIONS:

| Materials used in production | $\$ 29,000$ |
| :--- | ---: |
| Direct Labor | 30,000 |
| Overhead | 42,000 |
| Total manufacturing costs | $\$ 101,000$ |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
48. Refer to Figure 2-2. What was Lonborg's operating income <loss> for the year?
a. $\$ 18,500$
b. $\$ 125,000$
c. $\$<3,500>$
d. $\$ 5,500$

ANS: C
SUPPORTING CALCULATIONS:

Sales
Cost of Goods Sold
Gross Margin
Sell. \& Admin.
Operating Income
\$125,000
106,500
18,500
22,000
<3,500>

DIF: Challenging OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
49. During the month of June, Telecom Inc. had cost of goods manufactured of $\$ 112,000$, direct materials cost of $\$ 52,000$, direct labor cost of $\$ 37,000$ and overhead cost of $\$ 26,000$. The Work in Process balance at June 30 equaled $\$ 10,000$. What was the Work in Process balance on June 1?
a. $\$ 7,000$
b. $\$ 13,000$
c. $\$ 10,000$
d. $\$ 115,000$

ANS: A
SUPPORTING CALCULATIONS:

| Direct materials | $\$ 52,000$ |
| :--- | ---: |
| Direct labor | 37,000 |
| Overhead | 26,000 |
| $\quad$ Total Manufacturing costs | 115,000 |
| Work in process $6 / 1$ | 7,000 |
| Work in process $6 / 30$ | $\$ 10,000>$ |
| Cost of goods manufactured | $\$ 112,000$ |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
50. Rancor, Inc. had a per-unit conversion cost of $\$ 2.50$ during April and incurred direct materials cost of $\$ 100,000$, direct labor costs of $\$ 75,000$, and overhead costs of $\$ 45,000$ during the month. How many units did they manufacture during the month?
a. 70,000
b. 18,000
c. 48,000
d. 30,000

ANS: C
SUPPORTING CALCULATIONS:
$(\$ 75,000+\$ 45,000) / \$ 2.50=\$ 48,000$
DIF: Challenging OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
51. Lakeland, Inc. manufactured 5,000 units during the month of March. They incurred direct materials cost of $\$ 100,000$ and overhead cost of $\$ 40,000$. If their per-unit prime cost was $\$ 26.00$ per unit how much direct labor cost did they incur during March?
a. $\$ 20,000$
b. $\$ 35,000$
c. $\$ 90,000$
d. $\$ 30,000$

ANS: D
SUPPORTING CALCULATIONS:
$(\$ 100,000+\$ 30,000) / 5,000=\$ 26.00$
DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
52. During the month of January, Enterprise, Inc. had total manufacturing costs of $\$ 110,000$. They incurred $\$ 40,000$ of direct labor cost and $\$ 30,000$ of overhead cost during the month. If the materials inventory on January 1 was $\$ 3,000$ less that the materials inventory on January 31, what was the cost of materials purchased during the month?
a. $\$ 37,000$
b. $\$ 43,000$
c. $\$ 40,000$
d. none of these

ANS: B
SUPPORTING CALCULATIONS:
Direct materials used \$ 40,000
Direct labor \$ 40,000
Overhead \$ 30,000
Total manufacturing costs \$110,000

| Direct materials purchased | $\begin{array}{r}\$ 43,000 \\ \text { Difference in inventory balances } \\ \text { Direct materials used }\end{array}$ |
| :--- | ---: |
|  | $\$ 40,000$ |

DIF: Challenging OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
53. 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?
a. $\$ 23,000$
b. $\$ 17,000$
c. $\$ 35,000$
d. $\$ 20,000$

ANS: A

## SUPPORTING CALCULATIONS:

| Materials inventory $7 / 1$ | $\$ 12,000$ |
| :--- | ---: |
| Purchases | 23,000 |
| Available | 35,000 |
| Materials inventory $7 / 31$ | $\underline{15,000}$ |
| Materials used in production | 20,000 |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
54. Kutlow, Inc. had cost of goods sold of $\$ 112,000$ for the year ended December 31, 20x8. The Finished Goods Inventory on January 1, 20x8 was $\$ 28,000$ and the Finished Goods Inventory on December 31, $20 x 8$ was $\$ 17,000$. What was the amount of Cost of Goods Manufactured for the year?
a. $\$ 129,000$
b. $\$ 101,000$
c. $\$ 67,000$
d. $\$ 113,000$

ANS: B

## SUPPORTING CALCULATIONS:

| Finished Goods 1/1 | $\$ 28,000$ |
| :--- | ---: |
| Cost of Goods Manufactured | $\underline{101,000}$ |
| ${ } 129,000 }$ |  |
| Finished Goods $12 / 31$ | $\underline{<17,000>}$ |
| Cost of Goods Sold | $\$ 112,000$ |

## DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting

55. Andover, Inc. had a gross margin for the month of February totaling $\$ 42,000$. They 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?
a. $\$ 100,000$
b. $\$ 42,000$
c. $\$ 58,000$
d. none of these

ANS: C
SUPPORTING CALCULATIONS:

| Sales $(5,000 \times \$ 20)$ | $\$ 100,000$ |
| :--- | ---: |
| Cost of Goods Sold | 58,000 |
|  | 42,000 |

```
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
```

Figure 2-3.
Bartlow, Inc. had the following Income Statement for the month of May.

Sales Revenue \$428,000
Cost of Goods Sold $\quad \underline{205,440}$
Gross Margin 222,560
Less:
Selling Expenses 81,320
Administrative Expenses $\quad$ 72,760
Operating Income
56. Refer to Figure 2-3. What was the sales revenue percent?
a. $100 \%$
b. $48 \%$
c. $52 \%$
d. $16 \%$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 428,000 / \$ 428,000=100 \%$
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
57. Refer to Figure 2-3. What was the cost of goods sold percent?
a. $100 \%$
b. $19 \%$
c. $52 \%$
d. $48 \%$

ANS: D
SUPPORTING CALCULATIONS:
$\$ 205,440 / \$ 428,000=48 \%$
DIF: Easy OBJ: $2.3 \quad$ NAT: AACSB Analytic | IMA-Reporting
58. Refer to Figure 2-3. What was the gross margin percent?
a. $52 \%$
b. $48 \%$
c. $17 \%$
d. $19 \%$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 222,560 / \$ 428,000=52 \%$
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
59. Refer to Figure 2-3. What was the selling expense percent?
a. $17 \%$
b. $19 \%$
c. $16 \%$
d. no correct answer

ANS: B
SUPPORTING CALCULATIONS:
$\$ 81,320 / \$ 428,000=19 \%$

DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
60. Refer to Figure 2-3. What was the administrative expense percent?
a. $17 \%$
b. $19 \%$
c. $16 \%$
d. $15 \%$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 72,760 / \$ 428,000=17 \%$
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
61. Refer to Figure 2-3. What was the operating income percent?
a. $15 \%$
b. $19 \%$
c. $17 \%$
d. $16 \%$

ANS: D
SUPPORTING CALCULATIONS:
$\$ 68,480 / \$ 428,000=16 \%$
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
Figure 2-4.
Junko Company makes financial calculators. During the year Junko manufactured 97,000 financial calculators. Finished Goods Inventory had the following units on hand:
$\begin{array}{ll}\text { January } 1 & 1,260 \\ \text { December } 31 & 1,040\end{array}$
62. Refer to Figure 2-4. How many financial calculators did Junko sell during the year?
a. 96,780
b. 97,220
c. 97,000
d. 98,260

ANS: B
SUPPORTING CALCULATIONS:
Units manufactured 97,000
Decrease in inventory balances $\quad \underline{97,220}$
Units sold 97,220
DIF: Challenging OBJ: 2.3 NAT: AACSB Analytic|IMA-Reporting
63. Refer to Figure 2-4. If each financial calculator had a per-unit product cost of $\$ 112$, what was the cost of Finished Goods Inventory on December 31?
a. $\$ 116,480$
b. $\$ 141,120$
c. $\$ 24,640$
d. none of these are correct

ANS: A
SUPPORTING CALCULATIONS:
$1,040 \times \$ 112=\$ 116,480$
DIF: Easy OBJ: 2.3 NAT: AACSB Analytic| IMA-Reporting
64. Refer to Figure 2-4. If each financial calculator has a per-unit product cost of $\$ 112$, what was the Cost of Goods Sold last year?
a. $\$ 10,864,000$
b. $\$ 10,839,360$
c. $\$ 11,005,120$
d. $\$ 10,888,640$

ANS: D
SUPPORTING CALCULATIONS:
$97,220 \times \$ 112=\$ 10,888,640$

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting

## Figure 2-5.

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

|  | $\underline{\text { July 1 }}$ | $\underline{\text { July } 31}$ |
| :--- | ---: | ---: |
| Materials | $\$ 6,200$ | $\$ 7,100$ |
| Work in Process | $\$ 700$ | $\$ 1,200$ |
| Finished Goods | $\$ 3,300$ | $\$ 2,700$ |

65. Refer to Figure 2-5. What was the cost of direct materials used in July?
a. $\$ 21,000$
b. $\$ 20,100$
c. $\$ 21,900$
d. $\$ 20,500$

ANS: B
SUPPORTING CALCULATIONS:
Materials 7/1 \$ 6,200
Purchases 21,000
Materials 7/31
<7,100>
Materials used
\$20,100

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
66. Refer to Figure $2-5$. What were the total manufacturing costs in July?
a. $\$ 71,000$
b. $\$ 50,000$
c. $\$ 69,600$
d. $\$ 70,100$

ANS: D
SUPPORTING CALCULATIONS:
Materials used

Direct Labor

| Direct Labor | 18,000 |
| :--- | ---: |
| Overhead | $\underline{32,000}$ |
| Total manufacturing costs | $\$ 70,100$ |

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
67. Refer to Figure 2-5. What was the Cost of Goods Manufactured for July?
a. $\$ 70,500$
b. $\$ 70,700$
c. $\$ 69,600$
d. $\$ 69,100$

ANS: C
SUPPORTING CALCULATIONS:
Total manufacturing costs $\quad \$ 70,100$
Work in Process 7/1
700
Work in Process 7/31
<1,200>
Cost of Goods Manufactured
\$69,600

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
68. Refer to Figure 2-5. What was the Cost of Goods Sold for July?
a. $\$ 70,200$
b. $\$ 69,600$
c. $\$ 71,300$
d. $\$ 71,100$

ANS: A
SUPPORTING CALCULATIONS:
Cost of Goods Manufactured $\quad \$ 69,600$
Finished Goods 7/1
3,300
Finished Goods 7/31
$\frac{\langle 2,700\rangle}{\$ 70,200}$
Cost of Goods Sold

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
69. Refer to Figure 2-5. If Econo Company sold 10,000 units during July and gross margin totaled $\$ 29,800$, what was the sales price per unit?
a. $\quad \$ 9.94$
b. $\$ 10.00$
c. $\$ 10.09$
d. $\$ 10.11$

ANS: B
SUPPORTING CALCULATIONS:

| Gross margin | $\$ 29,800$ |
| :--- | ---: |
| Cost of Goods Sold | 70,200 |
| $(10,000 \times \$ ?)$ | 100,000 |
| Sales Price per unit | $\$$ |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Business Economics

Figure 2-6.
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
70. Refer to Figure 2-6. What was Gross Margin for the year?
a. $\$ 60,000$
b. $\$ 100,000$
c. $\$ 40,000$
d. none of these

ANS: C
SUPPORTING CALCULATIONS:
$\begin{array}{ll}\text { Operating Income } & \$ 10,000 \\ \text { Selling and Admin. } & \underline{\$ 30,000} \\ \text { Gross margin } & \$ 40,000\end{array}$

DIF: Challenging OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
71. Refer to Figure 2-6. What was Cost of Goods Sold for the year?
a. $\$ 60,000$
b. $\$ 40,000$
c. $\$ 100,000$
d. none of these

ANS: A
SUPPORTING CALCULATIONS:
Sales (\$40,000/.40) \$100,000
Gross Margin <40,000>
Cost of Goods Sold
60,000
Also \$40,000/. $40 \times .60$
DIF: Challenging OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
72. Refer to Figure 2-6. How many units were sold during the year?
a. 3,333
b. 1,000
c. 1,500
d. 2,000

ANS: D
SUPPORTING CALCULATIONS:
Cost of goods Sold $\$ 60,000 / \$ 30=2,000$ units
DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
73. Refer to Figure 2-6. What was the sales price per unit?
a. $\quad \$ 50$
b. $\$ 30$
c. $\$ 20$
d. $\$ 10$

ANS: A
SUPPORTING CALCULATIONS:
Sales $\$ 100,000 / 2,000$ units $=\$ 50$
DIF: Medium OBJ: $2.3 \quad$ NAT: AACSB Analytic | IMA-Reporting

## Figure 2-7.

Gateway Company produces a product with the following per-unit costs:
Direct Materials \$11

Direct Labor 8
Overhead 15
Last year, Gateway produced and sold 750 units at a sales price of $\$ 68$ each. Total selling and administrative expense was $\$ 22,000$.
74. Refer to Figure 2-7. Prime cost per-unit was?
a. $\quad \$ 19$
b. $\$ 23$
c. $\$ 34$
d. $\$ 11$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 11+\$ 8=\$ 19$
DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
75. Refer to Figure 2-7. Cost of Goods Sold last year was?
a. $\$ 47,500$
b. $\$ 25,500$
c. $\$ 14,250$
d. $\$ 51,000$

ANS: B
SUPPORTING CALCULATIONS:
$750 \times \$ 34$
DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
76. Refer to Figure 2-7. Total operating income last year was?
a. $\$ 29,000$
b. $\$ 51,000$
c. $\$ 25,500$
d. $\$ 3,500$

ANS: D
SUPPORTING CALCULATIONS:
Sales
\$51,000

Cost of Goods Sold
<25,500>
Sell. and Admin.
Operating Income
<22,000>

DIF: Medium
OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting

## Figure 2-8.

Last year Quest Company incurred the following costs:

| Direct Materials: | $\$ 40,000$ |
| :--- | ---: |
| Direct Labor: | 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.
77. Refer to Figure 2-8. Total period expense was?
a. $\$ 24,000$
b. $\$ 190,000$
c. $\$ 46,000$
d. $\$ 250,000$

ANS: C
SUPPORTING CALCULATIONS:
$\$ 24,000+\$ 22,000=\$ 46,000$
DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
78. Refer to Figure 2-8. Gross margin per-unit was?
a. $\$ 125$
b. $\$ 7$
c. $\$ 95$
d. $\$ 30$

ANS: D
SUPPORTING CALCULATIONS:
Sales ( $2000 \times \$ 125$ )
Cost of Goods Sold
Gross Margin
DIF: Medium OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
79. Refer to Figure 2-8. Total product costs were?
a. $\$ 190,000$
b. $\$ 100,000$
c. $\$ 150,000$
d. $\$ 236,000$

ANS: A
SUPPORTING CALCULATIONS:
$\$ 40,000+\$ 60,000+\$ 90,000=\$ 190,000$

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
80. Refer to Figure 2-8. Conversion cost per unit was?
a. $\quad \$ 50$
b. $\$ 75$
c. $\$ 95$
d. $\$ 125$

ANS: B
SUPPORTING CALCULATIONS:
$(\$ 60,000+\$ 90,000) / 2,000=\$ 75$
DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
81. Cost is:
a. the amount of cash or cash equivalent sacrificed for goods and/or services that are expected to bring a current or future benefit to the organization.
b. a dollar measure of the resources used to achieve a given benefit.
c. incurred to produce future benefits.
d. all of these.
ANS: D
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic |IMA-Business Economics
82. Price is not:
a. the revenue per unit.
b. greater than cost in order for the firm to earn income.
c. the same as cost.
d. the same as cost per unit plus the income per unit.

ANS: C DIF: Easy OBJ: 2.1
NAT: AACSB Analytic |IMA-Business Economics
83. Assigning costs
a. involves the way that a cost is linked to some cost object.
b. tells the company why the money was spent.
c. to a cost object using a reasonable and convenient method is allocation.
d. all of these.
ANS: D
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic | IMA-Business Economics
84. An opportunity cost is:
a. one that increases as output increases and decreases as output decreases.
b. a cost that does not increase as output increases and does not decrease as output decreases.
c. the benefit given up or sacrificed when one alternative is chosen over another.
d. a cost that cannot be easily and accurately traced to a cost object.
ANS: C
DIF: Easy
OBJ: 2.1

NAT: AACSB Analytic |IMA-Business Economics
85. Production costs that are NOT attached to units that are sold are reported as:
a. selling expenses
b. cost of goods sold
c. administrative costs
d. inventory

ANS: D DIF: Medium OBJ: 2.1
NAT: AACSB Analytic | IMA-Reporting
86. If beginning work-in-process inventory is $\$ 120,000$, ending work-in-process inventory is $\$ 160,000$, cost of goods manufactured is $\$ 400,000$ and direct materials used are $\$ 100,000$, what are the conversion costs?
a. $\$ 140,000$
b. $\$ 280,000$
c. $\$ 300,000$
d. $\$ 340,000$

ANS: D
SUPPORTING CALCULATIONS:
$\$ 400,000+\$ 160,000-\$ 120,000-\$ 100,000=\$ 340,000$
DIF: Challenging OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
87. Information from the records of Place, Inc., for December 20X9 is as follows:

Sales
\$820,000
Selling and administrative expenses 140,000
Direct materials purchases 176,000
Direct labor 200,000
Factory overhead 270,000
Direct materials, December $1 \quad 24,000$
Work in process, December $1 \quad 50,000$
Finished goods, December $1 \quad 46,000$
Direct materials, December $31 \quad 28,000$
Work in process, December $31 \quad 56,000$
Finished goods, December 3138,000
Net income for the month of December is:
a. $\$ 644,000$.
b. $\$ 36,000$.
c. $\$ 636,000$.
d. $\$ 180,000$.

ANS: B
SUPPORTING CALCULATIONS:
COGM $=(\$ 24,000+\$ 176,000-\$ 28,000)+\$ 200,000+\$ 270,000+\$ 50,000-\$ 56,000=\$ 636,000$
COGS $=\$ 636,000+\$ 46,000-\$ 38,000=\$ 644,000$
$\mathrm{NI}=\$ 820,000-\$ 140,000-\$ 644,000=\$ 36,000$
DIF: Challenging OBJ: 2.3 NAT: AACSB Analytic | IMA-Business Economics
88. Information from the records of Cain Corporation for December 20X9 are as follows:

| Sales | $\$ 1,230,000$ |
| :--- | ---: |
| Selling and administrative expenses | 210,000 |
| Direct materials used | 264,000 |
| Direct labor | 300,000 |

Factory overhead
405,000
Inventories
Direct materials

| Dec. 1, 20X9 | Dec. 31, 20X9 |  |
| :---: | :---: | :---: |
| $\$ 36,000$ | $\$ 42,000$ |  |
| 75,000 | 84,000 |  |
| 69,000 |  | 57,000 |

Finished goods
69,000
57,000
The conversion costs are:
a. $\$ 960,000$.
b. $\$ 1,179,000$.
c. $\$ 705,000$.
d. $\$ 564,000$.

ANS: C
SUPPORTING CALCULATIONS:
$\$ 300,000+\$ 405,000=\$ 705,000$
DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
89. Information from the records of Cain Corporation for December 20X9 are as follows:

| Sales | $\$ 1,230,000$ |
| :--- | ---: |
| Selling and administrative expenses | 210,000 |
| Direct materials used | 264,000 |
| Direct labor | 300,000 |
| Factory overhead | 405,000 |

Inventories
Direct materials
Work in process
Finished goods

| Dec. 1, 20X9 | Dec. 31, 20X9 |  |
| :---: | :---: | :---: |
| $\$ 36,000$ | $\$ 42,000$ |  |
| 75,000 | 84,000 |  |
| 69,000 |  | 57,000 |

The prime costs are:
a. $\$ 960,000$.
b. $\$ 564,000$.
c. $\$ 705,000$.
d. $\$ 969,000$.

ANS: B
SUPPORTING CALCULATIONS:
$\$ 264,000+\$ 300,000=\$ 564,000$
DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
90. 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 labor | 450,000 |

Direct labor 450,000
Inventories
Dec. 1, 20X9 Dec. 31, 20X9
Direct materials
Work in process
\$36,000
75,000
\$42,000
84,000

69,000
57,000
The cost of direct materials purchased is:
a. $\$ 397,500$.
b. $\$ 403,500$.
c. $\$ 367,500$.
d. $\$ 405,000$.

ANS: B
SUPPORTING CALCULATIONS:
$\$ 397,500+\$ 42,000-\$ 36,000=\$ 403,500$
DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics

## MATCHING

Select the appropriate classification for each of the following costs.
a. Period
b. Product

1. Advertising costs
2. Cost Accountant's salary
3. Factory Supervisor's salary
4. Research and Development costs
5. Marketing costs
6. Cost of shipping products to customers
7. Supplies for factory washroom
8. Assembly line worker's wages
9. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
2. ANS: A DIF: Easy OBJ: 2.2 NAT: AACSB Analytic |IMA-Business Economics
3. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
4. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
5. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
6. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
7. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
8. ANS: B DIF: Easy 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 labor
c. overhead
d. selling expense
e. administrative expense
9. cost of tires
10. factory supplies
11. general accounting costs
12. factory security costs
13. factory janitorial costs
14. salary of chief executive officer
15. depreciation of vehicles used by sales personnel
16. cost of windshields used in the production process
9. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
10. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
11. ANS: E DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
12. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
13. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
14. ANS: E DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
15. ANS: D DIF: Easy OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
16. ANS: A

DIF: Easy
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
17. gross margin - period costs
18. marketing and distributing costs
19. number of units sold multiplied by sales price per unit
20. sales - cost of goods sold
21. number of units sold multiplied by product cost per unit
17. ANS: E

DIF: Easy
OBJ: 2.3
NAT: AACSB Analytic|IMA-Reporting
18. ANS: B
DIF: Easy
OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
19. ANS: C

NAT: AACSB Analytic | IMA-Reporting
20. ANS: A DIF: Easy

NAT: AACSB Analytic | IMA-Reporting
21. ANS: D DIF: Easy OBJ: 2.3

NAT: AACSB Analytic | IMA-Reporting
Select the appropriate classification for each of the items listed below.
a. Product cost
b. Period cost
22. Cost of nails used by a home builder
23. Fees paid to an advertising firm
24. Sugar used in soft drink production
25. Rental cost of executive Lear jet
26. Cost of conference for sales team
27. Factory supervisor's salary
28. Fees paid to outside auditing firm
29. Factory security costs
22. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
23. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
24. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
25. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
26. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
27. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
28. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
29. ANS: A DIF: Easy 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
30. (direct labor + overhead)/units produced
31. (total manufacturing costs + work in process beginning - work in process ending)/units produced
32. (direct materials + direct labor)/units produced
30. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
31. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
32. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
Select the appropriate definition for each of the items listed below.
a. period cost
b. direct cost
c. opportunity cost
d. variable cost
e. indirect cost
f. fixed cost
g. product cost
33. A benefit given up when one alternative is chosen over another
34. A cost that stays the same in total regardless of changes in output
35. A cost that is difficult to trace to a cost object
36. A manufacturing cost
37. A cost that is not inventoried
38. A cost that can be easily traced to a cost object
39. A cost that increases in total as output increases
33. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
34. ANS: F DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
35. ANS: E DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
36. ANS: G DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
37. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
38. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
39. ANS: D DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
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
40. The cost of units finished but not sold at the end of the current period
41. Direct materials + direct labor + overhead
42. The cost of units unfinished at the end of the current period
43. Product cost per-unit $\times$ units sold
44. (direct materials + direct labor + overhead) $+/-$ the change in work in process inventory from the beginning to the end of the current period
40. ANS: B
DIF: Easy
OBJ: $2.2 \mid 2.3$
NAT: AACSB Analytic |IMA-Business Economics | IMA-Reporting
41. ANS: E DIF: Easy OBJ: $2.2 \mid 2.3$

NAT: AACSB Analytic |IMA-Business Economics | IMA-Reporting
42. ANS: A DIF: Easy OBJ: $2.2 \mid 2.3$

NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
43. ANS: C DIF: Easy OBJ: $2.2 \mid 2.3$

NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
44. ANS: D DIF: Easy OBJ: $2.2 \mid 2.3$

NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
Select the appropriate classification of the items listed below.
a. selling expense
b. administrative expense
c. direct materials
d. direct labor
e. overhead
45. Chief of surgery's salary at a hospital
46. Wages of assembly line workers in an automobile plant
47. Cost of lubricating factory machinery
48. Cost of shipping goods to customers
49. Glue used in the manufacture of furniture
50. Cost of engines in the manufacture of airplanes
51. Salary of chief executive officer
52. A professor's salary at a university
45. ANS: D DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
46. ANS: D DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
47. ANS: E DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
48. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
49. ANS: E DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
50. ANS: C DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
51. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
52. ANS: D DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
Select the appropriate classification of the output generated by each of the following industries.
a. Tangible
b. Intangible
53. CPA firm
54. Car manufacturer
55. Law firm
56. Medical clinic
57. Bowling alley
58. Fast food restaurant
59. Video rental
60. Professional sports franchise
53. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
54. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic | IMA-Business Economics
55. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
56. ANS: B

DIF: Easy
OBJ: 2.2
NAT: AACSB Analytic | IMA-Business Economics
57. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
58. ANS: A DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
59. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic |IMA-Business Economics
60. ANS: B DIF: Easy OBJ: 2.2

NAT: AACSB Analytic|IMA-Business Economics
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 DIF: Easy

OBJ: 2.3
NAT: AACSB Analytic | IMA-Reporting
62. ANS: D DIF: Easy OBJ: 2.3

NAT: AACSB Analytic |IMA-Reporting
63. ANS: B DIF: Easy

OBJ: 2.3
NAT: AACSB Analytic |IMA-Reporting
64. ANS: A DIF: Easy OBJ: 2.3

NAT: AACSB Analytic |IMA-Reporting
65. ANS: C DIF: Easy 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.

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
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

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics
2. Arcadia Company, who manufactures recreational vehicles, incurred the following costs during the current year.

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

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
Direct Direct Materials Labor

Period Cost
Selling Administrative

1. Wages of general office personnel
2. Cost of tires
3. Factory supervisor's salary
4. Conference for marketing personnel
5. Factory security guards X
6. Research and development
7. Assembly line workers X
8. Company receptionist
9. Advertising cost

| Product Cost |  |  | Period Cost |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct | Direct |  | Selling |  |  |  |  |  |  |  | Administrative |
| Materials | Labor | Overhead | Expense | Expense |  |  |  |  |  |  |  |

Period Cost
Expense
10. Cost of shipping vehicles to
customers

DIF: Medium 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 labor of $\$ 78,000$ was incurred and overhead equaled $\$ 84,000$. Selling and administrative expenses totaled $\$ 66,000$ 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. $(\$ 96 \times 200)=\$ 19,200$

DIF: Medium 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 labor of $\$ 430,000$ was incurred and overhead equaled $\$ 645,000$. 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 $(86,000 \times \$ 21)$
\$1,806,000
COGS $(86,000 \times \$ 18.50) \quad 1,591,000$
Gross Margin
215,000
E. Gross Margin
\$ 215,000
Less: Sell. and admin.
157,000
Operating Income
58,000
F. $(80,000 \times \$ 18.50)=\$ 1,480,000$
G. $(6,000 \times \$ 18.50)=\$ 111,000$

DIF: Medium OBJ: 2.2|2.3
NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
5. 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 labor 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. $10,000 \times \$ 34-(\$ 200,000$ of direct labor cost $)=\$ 140,000$
C. $10,000 \times \$ 42-(\$ 200,000$ of direct labor cost $)=\$ 220,000$
D. Sales Revenue $(10,000 \times \$ 100)$
\$1,000,000
Cost of Goods Sold $\quad \mathbf{5 6 0 , 0 0 0}$
Gross Margin $\quad 440,000$
E. Gross Margin \$ 440,000

Less: Sell. and Admin.
Operating Income $\quad 200,000$
DIF: Challenging OBJ: 2.2|2.3
NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
6. Tucker Company, a manufacturing firm, has supplied the following information from its accounting records for the month of April.

| Direct labor 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 | $\mathbf{1 7 , 0 0 0}$ |  |
|  | 18,475 |  |
| Materials Inventory, April 30 | 1,200 |  |
| Materials used |  | $\$ 17,275$ |
| Direct Labor |  | 12,000 |
| Overhead | 7,000 |  |
| Total Manufacturing costs |  | 36,275 |
| Work in Process, April 1 | 2,000 |  |
| Work in Process, April 30 |  | $\mathbf{< 2 , 8 0 0 >}$ |
| Cost of Goods Manufactured |  | $\$ 35,475$ |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
7. In June, Olympic Company purchased materials costing $\$ 38,000$, and incurred direct labor cost of $\$ 42,000$. Overhead totaled $\$ 27,000$ for the month. Information on inventories was as follows.

|  | June 1 | June 30 |
| :--- | ---: | ---: |
| 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 \$ 3,000Purchases38,000
Materials, 6/30 <2,700>
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, $6 / 30<1,275>$
Cost of Goods Manufactured \$107,025
D. Cost of Goods Manufactured $\$ 107,025$
Finished Goods, 6/1
2,500
Finished Goods, 6/30
Cost of Goods Sold
<1,775>
\$107,750

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
8. 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 labor 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 | $<5,100>$ | $\$ 8,400$ |
| Materials used |  | 22,000 |
| Direct Labor |  | 40,000 |
| Overhead |  | 70,400 |
| Total manufacturing costs | 4,200 |  |
| Work in Process Inventory, Nov. 1 |  | $<2,750>$ |

Cost of Goods Manufactured

## Templar Company <br> 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 | $<3,750>$ |
| Cost of Goods Sold | $\$ 70,350$ |
| DIF: Medium $\quad$ OBJ: 2.3 | NAT: AACSB Analytic |

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 totaled $\$ 2,000,000$.

## 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

$$
(75,000 \times \$ 540)
$$

40,500,000
Gross Margin
2,625,000
C. Gross Margin
\$ 2,625,000
Selling and Adm. Expenses $\quad \underline{2,000,000}$
Operating Income 625,000
D. Sales Revenue
\$39,675,000
Cost of Goods Sold
$(69,000 \times \$ 540) \quad 37,260,000$
Gross Margin 2,415,000
Selling and Adm. Expenses $\quad \underline{2,000,000}$
Operating Income $\quad 415,000$
DIF: Medium 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. $1 \quad 7,500$
Work in Process Inventory, Jan $1 \quad 9,000$
Finished Goods Inventory, Dec. $31 \quad 6,000$
Work in Process Inventory, Dec. $31 \quad 11,000$

Cost of Goods Manufactured
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* | 53,500 |
| Gross Margin | 66,500 |
| Less: | 12,000 |
| Selling Expense | 17,000 |
| Administrative Expense | $\$ 37,500$ |
| $\quad$ Operating Income | $\$ 52,000$ |
| *Cost of Goods Manufactured | 7,500 |
| $\quad$ Finished Goods Inventory, Jan. 1 | $<6,000>$ |

DIF: Medium 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.

|  | January 1 | December 31 |
| :--- | ---: | ---: |
| Materials | $\$ 21,000$ | $\$ 23,500$ |
| Work in Process | 17,500 | 8,500 |
| Finished Goods | 26,000 | 27,000 |
|  |  | $\$ 40,000$ |
| Direct Labor |  | 31,000 |
| Selling Expenses | 400,000 |  |
| Sales Revenue | 14,500 |  |
| Administrative Expenses | 62,000 |  |
| Purchases of raw materials | 50,000 |  |
| Factory Supervision | 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* | 182,500 |
| Gross Margin | 217,500 |
| Less: | 31,000 |
| Selling Expenses | $\mathbf{1 4 , 5 0 0}$ |
| Administrative Expenses |  |


|  |  |
| :--- | ---: |
| Operating Income | $\$ 172,000$ |
|  |  |
| *ost of Goods Manufactured $* *$ |  |
| Finished Goods Inventory, Jan. 1 | $\$ 183,500$ |
| Finished Goods Inventory, Dec. 31 | 26,000 |
| Cost of Goods Sold | $<27,000>$ |
|  | 182,500 |
| **Purchases of raw materials | $\$ 62,000$ |
| Materials Inventory, 1/1 | 21,000 |
| Materials Inventory, 12/31 | $<23,500>$ |
| Materials used | 59,500 |
| Direct Labor | 40,000 |
| Overhead (\$50,000 + $\$ 25,000)$ | 75,000 |
| Total manufacturing costs | 174,500 |
| Work in Process Inventory, Jan. 1 | 17,500 |
| Work in Process Inventory, Dec. 31 | $<8,500>$ |
| Cost of Goods Manufactured | $\$ 183,500$ |

## DIF: Challenging 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 labor 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 <br> Schedule of Cost of Goods Manufactured <br> For the month of May

| Materials Inventory, 5/1 | $\$ 1,250$ |  |
| :--- | ---: | :---: |
| Purchases of materials | 20,000 |  |
| Materials Inventory, 5/31 | $2,500>$ |  |
| Materials used | $\$ 18,750$ |  |
| Direct labor | 11,500 |  |
| Overhead $(7,500+6,500)$ | 14,000 |  |
| Total Manufacturing costs | 44,250 |  |

Work in Process, 5/1
Work in Process, 5/31
<1,500>
Cost of Goods Manufactured
\$45,850

13. See the following separate cases.

|  | Case \#1 | $\frac{\text { Case \#2 }}{}$$\$ 1,000$ $\$ 1,300$  <br> Sales A 500 <br> Cost of Goods Manufactured 100 D <br> Finished Goods Inventory (beginning balance) 150 200 <br> Finished Goods Inventory (ending balance) B 600 <br> Cost of Goods Sold 300 E <br> Gross Margin C 75 <br> Selling Expenses 50 40 <br> Administrative Expenses 200 F Operating Income |
| :--- | ---: | ---: |

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

|  | Case \#1 | Case \#2 |
| :---: | :---: | :---: |
| Sales | \$1,000 | \$1,300 |
| Cost of Goods Manufactured | 750 | 500 |
| Finished Goods Inventory (beginning balance) | 100 | 300 |
| Finished Goods Inventory (ending balance) | <150> | <200> |
| Cost of Goods Sold | 700 | 600 |
| Gross Margin | 300 | 700 |
| Selling Expenses | 50 | 75 |
| Administrative Expenses | 50 | 40 |
| Operating Income | 200 | 585 |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
14. See the following separate cases.

|  | Case \#1 | Case \#2 |
| :--- | ---: | ---: |
| Purchase of materials | $\$ 5,000$ | C |
| Materials Inventory (beginning balance) | A | 220 |
| Materials Inventory (ending balance) | 1,000 | 350 |
| Direct Labor | 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,D)
ANS:

|  | Case \#1 | Case \#2 |
| :---: | :---: | :---: |
| Purchases of materials | \$ 5,000 | \$ 3,500 |
| Materials Inventory (beginning balance) | 750 | 220 |
| Materials Inventory (ending balance) | <1,000> | <350> |
| Materials used | 4,750 | 3,370 |
| Direct Labor | 7,000 | 4,250 |
| Overhead | 2,750 | 2,000 |
| Total Manufacturing Costs | 14,500 | 9,620 |
| Work in Process Inventory, (beginning balance) | 1,200 | 1,230 |
| Work in Process Inventory, (ending balance) | <1,100> | <650> |
| Cost of Goods Manufactured | \$14,600 | \$10,200 |

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
15. 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 | 601,920 |
| ${ } }$ | 310,080 |
| Less: | 164,160 |
| Selling Expense | $\mathbf{6 3 , 8 4 0}$ |
| Administrative Expense | $\$ 82,080$ |

## 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. $\quad 63,840 / 912,000=7 \%$
F. $82,080 / 912,000=9 \%$

DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
16. 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 | <7,500> |
|  | Cost of Goods Sold | 156,880 |
|  | Sales Revenue | \$212,000 |
|  | Cost of Goods Sold | 156,880 |
|  | Gross Margin | 55,120 |
|  | Less: |  |
|  | Selling Expense | 19,080 |
|  | Administrative Expense | 15,900 |
|  | Operating Income | \$ 20,140 |

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

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
17. Rizzuto Company supplied the following information for the month of January.

Cost of Goods Sold percent


Selling Expense percent
Administrative expense

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

ANS:

## Rizzuto Company

Income Statement
For the month of January

| Sales Revenue | $\$ 500,000$ |
| :--- | ---: |
| Cost of Goods Sold $(500,000 \times 62 \%)$ | 310,000 |
| Gross Margin $(500,000 \times 38 \%)$ | 190,000 |
| Less: | 30,000 |
| Selling Expense $(500,000 \times 6 \%)$ | 65,000 |
| Administrative Expense $(500,000 \times 13 \%)$ | 95.000 |
| Operating Income |  |

DIF: Medium 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 Good Sold
C. Total Selling and Administrative expenses

ANS:
A. $\quad$ 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. $\quad \underline{81,900}$
Operating Income
DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
19. Wapato Company produces a product with the following per unit costs.

Direct materials \$17
Direct labor 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 $(3,000 \times 80)$ <br> Cost of Goods Sold <br> Gross Margin | $\$ 240,000$ |
| :--- | :--- | ---: |
|  | Less: | 120,000 |
|  | Selling and Administrative expenses <br> Operating Income | $\mathbf{2 5 , 0 0 0}$ |
|  | 95,000 |  |

D. $17+11=\$ 28$

DIF: Easy OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
20. Tesco Company showed the following costs for last month.

| Direct Materials | $\$ 40,000$ |
| :--- | ---: |
| Direct Labor | 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 $(20,000 \times \$ 18) \quad 360,000$
Cost of Goods Sold $\quad \underline{127,000}$
Gross Margin 233,000
Less:
Selling Expense $\quad 17,000$
Administrative Expense $\quad \underline{12,000}$

Operating Income
DIF: Medium 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 labor, or overhead.

DIF: Medium 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.

DIF: Medium OBJ: 2.2|2.3
NAT: AACSB Analytic | IMA-Business Economics | IMA-Reporting
3. 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 labor 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.

DIF: Medium OBJ: 2.3 NAT: AACSB Analytic | IMA-Reporting
4. List and describe the three categories of manufacturing costs.

ANS:
Direct materials consists 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 labor consists of labor 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 labor category. Examples of overhead costs include; insurance on the factory, machinery deprecation, indirect labor, indirect materials, factory supplies, etc..

$$
\text { DIF: Medium } \quad \text { OBJ: } 2.2 \quad \text { NAT: AACSB Analytic | IMA-Business Economics }
$$

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 labor, 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. Noninventoriable costs are also referred to as period costs or non-manufacturing costs.

DIF: Medium OBJ: 2.2 NAT: AACSB Analytic | IMA-Business Economics

