# Horngren's Financial \& Managerial Accounting, 4e (Nobles) <br> Chapter 16 Introduction to Managerial Accounting 

## Learning Objective 16-1

1) Managerial accounting focuses on providing information for internal planning and control.

Answer: TRUE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
2) Financial accounting prepares reports for internal purposes, whereas managerial accounting provides information to external stakeholders.
Answer: FALSE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
3) The IMA standards of ethical practice require managerial accountants to maintain their professional competence.
Answer: TRUE
Diff: 1
LO: 16-1
AACSB: Ethical Understanding
AICPA Functional: Reporting
4) The accountant for Myra Lido deliberately deferred cash payments for business expenses in order to record a higher operating cash flow for the company. As long as the amount was not material, this would not be considered unethical behavior.

## Answer: FALSE

Diff: 1
LO: 16-1
AACSB: Ethical Understanding
AICPA Functional: Reporting
5) Financial statements prepared for investors and creditors often include forward-looking information because they make decisions based on a company's future prospects.
Answer: FALSE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
6) Management accounting reporting by a public firm is required to follow the rules of GAAP and guidelines of the Securities Exchange Commission.
Answer: FALSE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
7) A budget is a managerial accounting tool used in the planning process.

Answer: TRUE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
8) Financial reporting is typically much more detailed than managerial accounting.

Answer: FALSE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
9) The IMA Standards of Ethical Practice include confidentiality, competence, credibility, and integrity.

Answer: TRUE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
10) ERP systems can integrate all of a company's functions, departments, and data into a single system.

Answer: TRUE
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
11) Which of the following is an objective of management accounting?
A) to generate financial statements of a company for tax reporting
B) to provide information to business managers to assist them in controlling their business
C) to provide information to shareholders to assist them with their investment decisions
D) to ensure that the reports produced for internal and external business purposes are GAAP compliant

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
12) Which of the following statements is true of management accounting?
A) The external stakeholders of a company are the primary users of management accounting.
B) Management accounting information is used to help managers plan and control their operations.
C) An external audit by an independent CPA is required for management accounting information.
D) Management accounting information must comply with Generally Accepted Accounting Principles.

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
13) Management accounting information of a company is primarily used by $\qquad$ .
A) its customers to understand the pricing of the product
B) its creditors to understand the credibility of the business
C) its employees to plan and control operations
D) its investors to make their investment decisions

Answer: C
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
14) Which of the following statements is true of financial accounting?
A) It provides information to investors needed for their investment decisions.
B) It provides forward-looking information needed for managing and delegating operations.
C) It focuses on detailed reports for parts of the company rather than the whole company.
D) It focuses on planning and controlling day-to-day operations.

Answer: A
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
15) Management's accountability to its suppliers and vendors is to $\qquad$ .
A) provide products to customers that are safe and free of defects
B) obey laws and pay taxes timely
C) provide a return on shareholders' investment
D) make timely payments and comply with contract terms

Answer: D
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
16) How is the management of a company accountable to its employees?
A) The management must provide products that are safe and free of defects.
B) The management must provide a safe workplace.
C) The management must ensure that it earns a net positive return on its investments.
D) The management must ensure the business is environmentally responsible to its community.

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
17) Management of a company is accountable to $\qquad$ for obeying laws and paying taxes.
A) the natural environment
B) its asset vendors
C) the securities exchange
D) the government

Answer: D
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
18) In which of the following ways is the management of a company accountable to its communities?
A) making timely interest payments to creditors and dividend payments to investors
B) ensuring the company's environmental impact is not harmful to its area of operations
C) providing a capital return on the shareholders' investment
D) repaying principal and interest to the suppliers

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
19) Managerial accounting includes the planning function. Which of the following items would be part of the planning function of a business's managerial accounting?
A) comparing actual performance to previously budgeted amounts
B) creating detailed budgets
C) implementing operational plans
D) evaluating results of operations

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
20) Comparing actual performance to previously budgeted amounts is part of the $\qquad$ .
A) controlling function of managerial accounting
B) planning function of managerial accounting
C) reporting function of managerial accounting
D) organizing function of managerial accounting

Answer: A
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
21) Which of the following is the primary objective of managerial accounting?
A) providing information that managers need to make operational decisions
B) providing historical data to investors and creditors
C) providing summarized results of operations
D) providing information to comply with laws and regulations of government bodies

Answer: A
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
22) Which of the following is the primary focus of financial accounting?
A) providing information that managers need to make operational decisions
B) providing summarized information on operational results to investors and creditors
C) providing budgets for future periods
D) providing highly detailed information on product lines, regions, and divisions

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
23) $\qquad$ is a philosophy of continuous improvement of products and processes.
A) Just-in-time (JIT) management
B) Enterprise resource planning (ERP)
C) Supply chain management (SCM)
D) Total quality management (TQM)

Answer: D
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
24) Which of the following describes a system in which suppliers deliver materials at the time they are needed and finished units are completed when customer orders need to be filled?
A) Supply chain management (SCM)
B) Just-in-time (JIT) management
C) Enterprise resource planning (ERP)
D) Total quality management (TQM)

Answer: B
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
25) What is total quality management (TQM)?
A) a philosophy of supplying customers with superior products and services
B) an exchange of information with suppliers and customers to create efficient and effective processes
C) a software system that integrates a company's functions, departments and data into a single system
D) a system which speeds the transformation of raw materials into finished products

Answer: A
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
26) An enterprise resource planning system (ERP) $\qquad$ .
A) is a cost management system in which a company produces products just in time to satisfy needs
B) requires the implementation of total quality management
C) integrates all worldwide functions, departments and data of a company into a single system
D) cannot be implemented in service companies

Answer: C
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
27) Which of the following correctly describes just-in-time (JIT) inventory management?
A) It is a production approach that maintains surplus goods at each stage of manufacture.
B) It is an inventory purchase approach that seeks purchase discounts on buying large quantities.
C) It is a cost management approach that focuses on maintaining lean inventory levels.
D) It is an inventory approach which stockpiles raw materials to protect against supply interruptions.

Answer: C
Diff: 2
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
28) Which of the following is true of just-in-time (JIT) inventory management?
A) It results in more storage and insurance cost.
B) It is a system in which the company produces product only after receiving an order.
C) It promotes surplus inventory to prevent production shut-down in case of supply interruptions.
D) It requires a surplus inventory of finished goods to ensure timely, or just-in-time, delivery to customers.
Answer: B
Diff: 2
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
29) Which of the following is a philosophy designed to integrate all organizational areas in order to provide customers with superior products and services, while meeting organizational goals throughout the value chain?
A) Supply chain management (SCM)
B) Just-in-time (JIT) management
C) Enterprise resource planning (ERP)
D) Total quality management (TQM)

Answer: D
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
30) The whole sequence of activities that add value to a company's products and services is called
$\qquad$
A) the value chain
B) the planning process
C) TQM production chain
D) enterprise resource planning

Answer: A
Diff: 1
LO: 16-1
AACSB: Concept
AICPA Functional: Reporting
31) Which of the following is one of the key standards of ethical practice published by the Institute of Management Accountants (IMA)?
A) objectivity
B) environmental sensitivity
C) technicality
D) confidentiality

Answer: D
Diff: 1
LO: 16-1
AACSB: Ethical Understanding
AICPA Functional: Reporting
32) Seria Inc. has received a bulk order from an overseas client. As a result, the reported earnings of this year is expected to be significantly higher than the estimates of financial analysts. Joshua, an accountant at Seria, tells this to one of his friends. Which of the IMA standards has Joshua violated?
A) objectivity
B) competence
C) confidentiality
D) technicality

Answer: C
Diff: 1
LO: 16-1
AACSB: Reflective Thinking
AICPA Functional: Reporting
33) You did not understand what the term accrual meant and failed to accrue the interest due at the end of the year on the company's bonds. Which of the IMA standards appears to have been violated here?
A) integrity
B) confidentiality
C) competence
D) objectivity

Answer: C
Diff: 1
LO: 16-1
AACSB: Reflective Thinking
AICPA Functional: Reporting

## Learning Objective 16-2

1) Product costs, such as direct materials, are expensed in the period they were paid.

Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
2) Unlike merchandising companies, income statements of service companies include cost of goods sold as a line item.
Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
3) Manufacturing businesses have inventory accounts, but merchandising businesses do not.

Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
4) Manufacturing businesses produce their own products, but merchandising businesses do not.

Answer: TRUE
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
5) If Royal Inc. purchases each unit of product $X$ for $\$ 100$ and can sell it in the market for $\$ 135$; the selling price of the product for Royal would be $\$ 100$.
Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
6) Merchandising companies, like service companies, do not have a Cost of Goods Sold account.

Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
7) Selling and administrative expenses are subtracted from the cost of goods sold to obtain operating profit.
Answer: TRUE
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
8) For external reporting purposes, GAAP requires companies to treat period costs as assets.

Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
9) The primary activity of manufacturing businesses is to purchase goods from a wholesaler and resell them.
Answer: FALSE
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
10) Service companies include companies that provide health care, communication, banking, and other important benefits to society.
Answer: TRUE
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
11) The income statement of a service company will most likely include $\qquad$ .
A) salary expense
B) factory overhead
C) cost of goods sold
D) direct materials

Answer: A
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
12) Which of the following is true of service companies?
A) All costs of service companies are product costs.
B) Service companies modify and resell products they buy from manufacturers.
C) Revenues of service companies are only recorded on cash receipt.
D) Service companies carry no inventories of products for sale.

Answer: D
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
13) For a manufacturing company, which of the following is a period cost?
A) direct materials
B) office rent
C) wages expense of factory workers
D) indirect materials

Answer: B
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
14) One of the primary activities of Rex Inc. is to purchase hats from Viva Inc. in Texas and sell them to its customers in Washington for a profit. It is likely that Rex is a $\qquad$ _.
A) manufacturing company
B) hybrid company
C) service company
D) merchandising company

Answer: D
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
15) Which of the following is most likely a service company?
A) a law firm
B) a car dealership
C) a grocery store
D) a patisserie

Answer: A
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
16) A company that uses labor, equipment, supplies, and facilities to convert raw materials into finished products is a $\qquad$ -.
A) merchandising company
B) manufacturing company
C) service company
D) trading company

Answer: B
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
17) Goods that have been started in the manufacturing process but are not yet complete are included in the $\qquad$ _.
A) Finished Goods Inventory account
B) Work-in-Process Inventory account
C) Raw Materials Inventory account
D) Cost of Goods Sold account.

Answer: B
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
18) Which of the following would appear as a line item on the income statements of both, a merchandiser and a manufacturer?
A) Direct labor
B) Cost of goods manufactured
C) Direct materials
D) Cost of goods sold

Answer: D
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
19) Damsel Inc. is a large manufacturer of auto tires. Damsel has provided the following information:

| Sales Revenue | $\$ 45,500$ |
| :--- | ---: |
| Beginning Finished Goods Inventory | 1,500 |
| Cost of Goods Sold | 32,500 |
| Cost of Goods Manufactured | 35,000 |

Calculate the amount of ending finished goods inventory reported in Damsel's balance sheet.
A) $\$ 10,500$
B) $\$ 36,500$
C) $\$ 4,000$
D) $\$ 3,500$

Answer: C
Explanation: C)
Beginning Finished Goods Inventory \$1,500
Add: Cost of Goods Manufactured $\quad \underline{35,000}$
Cost of Goods Available for Sale 36,500
Less: Cost of Goods Sold $\underline{-32,500}$
Ending Finished Goods Inventory $\$ \underline{\underline{\$ 4,000}}$
Diff: 2
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
20) The balance sheet of a $\qquad$ company will show Work-in-Process Inventory as a line item.
A) manufacturing
B) merchandising
C) service
D) trading

Answer: A
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
21) Partial income statements of Company A and Company B are provided below:

## Company A

Company B

| Revenue |  | $\$ 80,000$ | Revenue | $\$ 50,000$ |  |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Expenses: |  |  | Cost of Goods Sold: |  |  |
| Utilities Expense | $\$ 5,000$ |  | Beginning Inventory | $\$ 4,000$ |  |
| Salaries Expense | 15,500 |  | Purchases and Freight In | 23,000 |  |
| Rent Expense | 3,200 |  | Ending Inventory | $-5,500$ |  |
| Total Expenses |  | 23,700 | Cost of Goods Sold |  | 21,500 |
| Operating Income |  | $\$ 56,300$ | Gross Profit | $\$ 28,500$ |  |

Which of the following statements is true?
A) Company A is a merchandising company.
B) Company B is a manufacturing company.
C) Company A is a manufacturing company.
D) Company A is a service company.

Answer: D
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
22) Product costs are expensed $\qquad$ .
A) when the products are consumed or sold
B) when the accounting period they are incurred in comes to an end
C) when the products are transferred to Work-in-Process Inventory account
D) when the market value of products goes above the recorded value

Answer: A
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
23) The Work-in-Process Inventory account includes the $\qquad$ ./
A) goods that are ready to be sold
B) goods that are partially completed
C) goods that have been sold in the market
D) goods that are damaged during production

Answer: B
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
24) Which of the following is true of finished goods inventory?
A) Finished Goods Inventory is an account used by a manufacturer and includes completed goods that have not yet been sold.
B) Finished Goods Inventory is an account used by a merchandiser and includes completed goods that have not yet been sold.
C) Finished Goods Inventory is an account used by service companies in lieu of raw materials inventory.
D) Finished Goods Inventory is an account used by a manufacturer in lieu of raw materials inventory.

Answer: A
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
25) Which of the following is true of product costs?
A) They are expensed in the period they are paid.
B) For external reporting, GAAP requires that they be expensed before the products are sold.
C) They are first recorded in an inventory account.
D) For merchandising companies, product costs do not include freight costs.

Answer: C
Diff: 1
LO: 16-2
AACSB: Concept
AICPA Functional: Reporting
26) Crystal Inc. is a merchandiser of stone ornaments. It sold 15,000 units in 2015 . The company has provided the following information:

| Sales Revenue | $\$ 557,000$ |
| :--- | ---: |
| Purchases (excluding freight in) | 300,000 |
| Selling and Administrative Expenses | 69,000 |
| Freight In | 15,000 |
| Beginning Merchandise Inventory | 45,000 |
| Ending Merchandise Inventory | 55,700 |

How much is the gross profit for 2015 ?
A) $\$ 183,700$
B) $\$ 304,300$
C) $\$ 252,700$
D) $\$ 257,000$

Answer: C
Explanation: C) \$304,300 (Cost of Goods Sold) = \$45,000 (Beginning Merchandise Inventory) + \$300,000 (Purchases) + \$15,000 (Freight In) - \$55,700 (Ending Merchandise Inventory)
$\$ 557,000$ (Sales Revenue) - \$304,300 (Cost of Goods Sold) = \$252,700 (Gross Profit)
Diff: 2
LO: 16-2
AACSB: Application
AICPA Functional: Measurement
27) Which of the following formulas represents cost of goods sold for a merchandising business?
A) Beginning Inventory - Ending Inventory = Cost of Goods Sold
B) Purchases and Freight In - Ending Inventory = Cost of Goods Sold
C) Ending Inventory + Purchases and Freight In - Beginning Inventory $=$ Cost of Goods Sold
D) Beginning Inventory + Purchases and Freight In - Ending Inventory $=$ Cost of Goods Sold Answer: D
Diff: 1
LO: 16-2
AACSB: Application
AICPA Functional: Reporting
28) Amber Corporation has provided the following information of its operating activities for 2015:

| Merchandise Inventory, January 1, 2015 | $\$ 150,000$ |
| :--- | ---: |
| Merchandise Inventory, December 31, 2015 | 75,000 |
| Purchases | 854,000 |
| Selling and Administrative Expenses | 65,000 |
| Sales Revenue | $1,000,000$ |

Required: Prepare Amber's income statement for the year ended December 31, 2015. Use the format provided below:

| Sales Revenue |  |  |
| :--- | :--- | :--- |
| Cost of Goods Sold |  |  |
| Beginning Inventory |  |  |
| Purchases |  |  |
| Cost of Goods Available for Sale |  |  |
| Ending Inventory |  |  |
| Cost of Goods Sold |  |  |
| Gross Profit |  |  |
| Selling and Administrative Expenses |  |  |
| Operating Income |  |  |

Answer: | AMBER CORPORATION |
| :--- |
| Income Statement |
| Year Ended December 31, 2015 |

| Sales Revenue |  | $\$ 1,000,000$ |
| :--- | ---: | ---: |
| Cost of Goods Sold |  |  |
| Beginning Inventory | $\$ 150,000$ |  |
| Purchases | $\underline{854,000}$ |  |
| Cost of Goods Available for Sale | $\$ 1,004,000$ |  |
| Ending Inventory | $\underline{-75,000}$ |  |
| Cost of Goods Sold |  | $\underline{929,000}$ |
| Gross Profit |  | 71,000 |
| Selling and Administrative Expenses |  | $\underline{65,000}$ |
| Operating Income | $\$ 6,000$ |  |

Diff: 2
LO: 16-2
AACSB: Application
AICPA Functional: Measurement
29) Excellent Inc. sells accounting textbooks. The following information summarizes Excellent's operating activities for 2015:

| Merchandise Inventory, January 1, 2015 | $\$ 10,000$ |
| :--- | ---: |
| Merchandise Inventory, December 31, 2015 | 7,000 |
| Purchases | 95,000 |
| Selling and Administrative Expenses | 65,000 |
| Sales Revenue | 180,000 |

Required: Prepare Excellent Inc. income statement for the year ended December 31, 2015.
Answer:
EXCELLENT INC.
Income Statement
Year Ended December 31, 2015

| Sales Revenue |  | $\$ 180,000$ |
| :--- | ---: | ---: |
| Cost of Goods Sold |  |  |
| Beginning Inventory | $\$ 10,000$ |  |
| Purchases | $\underline{95,000}$ |  |
| Cost of Goods Available for Sale | 105,000 |  |
| Ending Inventory | $\underline{-7,000}$ |  |
| Cost of Goods Sold |  | $\underline{98,000}$ |
| Gross Profit |  | 82,000 |
| Selling and Administrative Expenses |  | $\underline{65,000}$ |
| Operating Income |  | $\underline{\underline{17,000}}$ |

Diff: 2
LO: 16-2
AACSB: Application
AICPA Functional: Measurement
30) Simons Inc. sells plasticware. The following information summarizes Simons' operating activities for 2015:

| Utilities Expense | $\$ 65,000$ |
| :--- | ---: |
| Rent Expense | 10,000 |
| Sales Commissions Expense | 32,500 |
| Purchases of Merchandise | 260,000 |
| Inventory on January 1, 2015 | 65,000 |
| Inventory on December 31, 2015 | 97,500 |
| Sales Revenue | 650,000 |

Prepare an income statement for Simons Inc., a merchandiser, for the year ended December 31, 2015 using the format below:

| Sales Revenue |  |  |
| :--- | :--- | :--- |
| Cost of Goods Sold |  |  |
| Beginning Inventory |  |  |
| Purchases |  |  |
| Cost of Goods Available for Sale |  |  |
| Ending Inventory |  |  |
| Cost of Goods Sold |  |  |
| Gross Profit |  |  |
| Selling Expenses |  |  |
| Sales Commissions Expense |  |  |
| Administrative Expenses |  |  |
| Rent Expense |  |  |
| Utilities Expense |  |  |
| Total Operating Expenses |  |  |
| Operating Income |  |  |

Income Statement
Year Ended December 31, 2015

| Sales Revenue |  | $\$ 650,000$ |
| :--- | ---: | ---: |
| Cost of Goods Sold |  |  |
| Beginning Inventory | $\$ 65,000$ |  |
| Purchases | $\underline{260,000}$ |  |
| Cost of Goods Available for Sale | $\mathbf{3 2 5 , 0 0 0}$ |  |
| Ending Inventory | $\underline{-97,500}$ |  |
| Cost of Goods Sold |  | $\underline{227,500}$ |
| Gross Profit |  | 422,500 |
| Selling Expenses |  |  |
| Sales Commissions Expense |  | 32,500 |
| Administrative Expenses | $\underline{65,000}$ | 75,000 |
| Rent Expense |  | $\underline{107,500}$ |
| Utilities Expense |  | $\underline{\$ 315,000}$ |
| Total Operating Expenses |  |  |
| Operating Income |  |  |

Diff: 2
LO: 16-2
AACSB: Application
AICPA Functional: Measurement
31) Best Inc., a merchandiser, sells office supplies. The following information summarizes Best's operating activities during 2015:

| Utilities Expense | $\$ 6,000$ |
| :--- | ---: |
| Rent for Store Expense | 8,000 |
| Sales Commissions Expense | 4,500 |
| Purchases of Merchandise | 54,000 |
| Inventory on January 1, 2015 | 30,000 |
| Inventory on December 31,2015 | 20,500 |
| Sales Revenue | 108,000 |

Required: Prepare an income statement for Best Inc. for the year ended December 31, 2015, using the format below.

| Sales Revenue |  |  |
| :--- | :--- | :--- |
| Cost of Goods Sold |  |  |
| Beginning Inventory |  |  |
| Purchases |  |  |
| Cost of Goods Available for Sale |  |  |
| Ending Inventory |  |  |
| Cost of Goods Sold |  |  |
| Gross Profit |  |  |
| Selling Expenses |  |  |
| Sales Commissions Expense |  |  |
| Administrative Expenses |  |  |
| Rent Expense |  |  |
| Utilities Expense |  |  |
| Total Operating Expenses |  |  |
| Operating Income |  |  |

Answer:

| Sales Revenue |  | $\$ 108,000$ |
| :--- | ---: | ---: |
| Cost of Goods Sold |  |  |
| Beginning Inventory | $\$ 30,000$ |  |
| Purchases | $\underline{54,000}$ |  |
| Cost of Goods Available for Sale | 84,000 |  |
| Ending Inventory | $\underline{-20,500}$ |  |
| Cost of Goods Sold |  | $\underline{63,500}$ |
| Gross Profit |  | 44,500 |
| Selling Expenses |  |  |
| Sales Commissions Expense |  |  |
| Administrative Expenses | 8,500 |  |
| Rent Expense | $\underline{6,000}$ |  |
| Utilities Expense |  | $\underline{18,500}$ |
| Total Operating Expenses |  | $\underline{\underline{\$ 26,000}}$ |
| Operating Income |  |  |

Diff: 3
LO: 16-2
AACSB: Application
AICPA Functional: Measurement

## Learning Objective 16-3

1) Product costs, such as factory overhead, should be treated as an asset until the product is sold.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
2) Manufacturing overhead includes all manufacturing costs, such as direct labor and direct materials.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
3) Manufacturing overhead includes indirect manufacturing costs, such as insurance and depreciation on the factory building.
Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
4) All costs incurred in the manufacture of final products are product costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
5) The cost of direct materials cannot easily be traced to the manufactured product and therefore it is a component of manufacturing overhead.
Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
6) Wages and benefits of assembly line workers are period costs.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
7) Wages and benefits of assembly line workers are included in manufacturing overhead.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
8) Wages and benefits of factory managers are considered as product costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
9) The three categories of period costs are direct materials, direct labor, and manufacturing overhead.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
10) Salary of a factory manager will be included in manufacturing overhead.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
11) Direct costs and indirect costs can be easily traced directly to a cost object.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
12) In a manufacturing company, the salary of sales staff is an example of period cost.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
13) Wages of factory janitors is considered non-manufacturing overhead as these are not directly related to the manufacturing process.
Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
14) Indirect materials costs such as lubes and cleaning fluids are product costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
15) Indirect materials costs are included in manufacturing overhead.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
16) For a manufacturer, rent paid for an office building is an example of a period cost.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
17) Factory rent, taxes, and insurance are included in manufacturing overhead.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
18) Transportation costs paid to ship raw materials to a company warehouse are considered product costs.
Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
19) Sales commissions are included in manufacturing overhead.

Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
20) In a manufacturing company, advertising and marketing costs are examples of period costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
21) In a manufacturing company, advertising and marketing costs are included in manufacturing overhead.
Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
22) In a manufacturing company, accounting, legal, and administrative costs are typical examples of product costs.
Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
23) In a manufacturing company, administrative costs are included in period costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
24) Repair and maintenance costs for factory equipment are product costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
25) Repair and maintenance costs for factory equipment are included in manufacturing overhead.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
26) Repair and maintenance costs of vehicles used to deliver products to customers are product costs. Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
27) Repair and maintenance costs of vehicles used to deliver products to the customers are included in manufacturing overhead.
Answer: FALSE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
28) Direct materials and direct labor are prime costs.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
29) In manufacturing, the cost objects are often units of product.

Answer: TRUE
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Measurement
30) Period costs are the $\qquad$ .
A) product costs must be paid in the accounting period in which they are incurred
B) costs that are incurred and expensed during the same accounting period
C) costs related to production of products the company purchases and sells
D) same as manufacturing overhead costs

Answer: B
Diff: 2
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
31) Which of the following is an example of a period cost for a manufacturing company?
A) advertising expense
B) depreciation on factory equipment
C) indirect materials
D) property taxes for the factory

Answer: A
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
32) Which of the following is a part of manufacturing overhead?
A) cost of raw materials
B) wages of assembly line workers
C) factory insurance
D) depreciation on office furniture

Answer: C
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
33) Which of the following is a product cost for a manufacturing company?
A) salary of administrative staff
B) wages paid to factory janitor
C) commissions paid to sales staff
D) depreciation on corporate building

Answer: B
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
34) Which of the following is a period cost for a manufacturing company?
A) office rent
B) wages of factory janitor
C) insurance cost of production equipment
D) raw materials

Answer: A
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
35) Which of the following is an example of direct labor cost in a factory?
A) wages of assembly line personnel
B) salary of vice president of production
C) wages of factory security guard
D) salary of production manager

Answer: A
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
36) Which of the following will be included in manufacturing overhead costs?
A) indirect labor and indirect materials
B) salaries of salesmen
C) direct materials and direct labor
D) delivery costs to ship goods to customers

Answer: A
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
37) Manufacturing overhead is also referred to as $\qquad$ .
A) indirect manufacturing costs
B) direct manufacturing costs
C) prime costs
D) period costs

Answer: A
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
38) Anything for which managers want a separate measurement of cost is called a $\qquad$ .
A) responsibility center
B) cost object
C) profit object
D) conversion cost

Answer: B
Diff: 1
LO: 16-3
AACSB: Concept
AICPA Functional: Reporting
39) Kyanite Corporation, a manufacturer reports costs for 2015 as follows:

| Raw Materials | $\$ 50,000$ |
| :--- | ---: |
| Wages to Line Workers | 25,000 |
| Office Rent | 14,000 |
| Indirect Materials | 30,000 |

How much is the total period costs of Kyanite?
A) $\$ 30,000$
B) $\$ 80,000$
C) $\$ 39,000$
D) $\$ 14,000$

Answer: D
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
40) Kyanite Corporation reports costs for 2015 as follows:

| Raw Materials | $\$ 50,000$ |
| :--- | ---: |
| Wages to Line Workers | 25,000 |
| Office Rent | 14,000 |
| Indirect Materials | 30,000 |

How much is the total product costs for 2015 ?
A) $\$ 30,000$
B) $\$ 105,000$
C) $\$ 119,000$
D) $\$ 75,000$

Answer: B
Explanation: B) \$105,000 (Total product costs) $=\$ 50,000$ (Raw Materials) $+\$ 25,000$ (Wage to Line Workers) + \$30,000 (Indirect Materials)
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
41) Which of the following is a product cost?
A) sales commissions
B) CEO's salary
C) delivery van depreciation
D) depreciation on production equipment

Answer: D
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
42) Which of the following correctly describes the accounting for indirect labor costs?
A) Indirect labor costs are product costs and are expensed as incurred.
B) Indirect labor costs are period costs and are expensed as incurred.
C) Indirect labor costs are product costs and are expensed when the manufactured product is sold.
D) Indirect labor costs are period costs and are expensed when the manufactured product is sold.

Answer: C
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
43) Which of the following correctly describes the accounting for factory depreciation?
A) Factory depreciation is a product cost and is expensed as incurred.
B) Factory depreciation is a period cost and is expensed as incurred.
C) Factory depreciation is a product cost and is expensed when the manufactured product is sold.
D) Factory depreciation is a period cost and is expensed when the manufactured product is sold.

Answer: C
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
44) Which of the following correctly describes the accounting for administrative expenses of a manufacturing company?
A) Administrative expenses are product costs and are expensed as incurred.
B) Administrative expenses are period costs and are expensed as incurred.
C) Administrative expenses are product costs and are expensed when the manufactured product is sold.
D) Administrative expenses are period costs and are expensed when the manufactured product is sold.

Answer: B
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
45) Which of the following correctly describes the accounting for advertising costs?
A) Advertising costs are product costs and are expensed as incurred.
B) Advertising costs are period costs and are expensed as incurred.
C) Advertising costs are product costs and are expensed when the manufactured product is sold.
D) Advertising costs are period costs and are expensed when the manufactured product is sold.

Answer: B
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
46) The following information relates to Webster Inc.

| Advertising Costs | $\$ 10,270$ |
| :--- | ---: |
| Administrative Salaries | 24,700 |
| Delivery Vehicle Depreciation | 1,027 |
| Factory Repair and Maintenance | 910 |
| Indirect Labor | 11,700 |
| Indirect Materials | 9,360 |
| Manufacturing Equipment Depreciation | 2,080 |
| Office Rent | 61,100 |
| President's Salary | 40,300 |
| Sales Revenue | 450,000 |
| Sales Salary | 4,500 |

How much were Webster's period costs?
A) $\$ 141,897$
B) $\$ 474,050$
C) $\$ 615,947$
D) $\$ 61,503$

Answer: A
Explanation: A)
Advertising Costs $\$ 10,270$
President's Salary $\quad 40,300$
Office Rent 61,100
Sales Salary 4,500
Delivery Vehicle Depreciation 1,027
Administrative Salaries $\underline{24,700}$
Total Period Cost \$141,897
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
47) The following information relates to Webster Inc.:

| Advertising Costs | $\$ 10,270$ |
| :--- | ---: |
| Sales Salary | 4,500 |
| Sales Revenue | 450,000 |
| President's Salary | 40,300 |
| Office Rent | 61,100 |
| Manufacturing Equipment Depreciation | 2,080 |
| Indirect Materials | 9,360 |
| Indirect Labor | 11,700 |
| Factory Repair and Maintenance | 910 |
| Direct Materials | 28,080 |
| Direct Labor | 35,100 |
| Delivery Vehicle Depreciation | 1,027 |
| Administrative Salaries | 24,700 |

How much were Webster's product costs?
A) $\$ 141,897$
B) $\$ 697,127$
C) $\$ 229,127$
D) $\$ 87,230$

Answer: D
Explanation: D)
Indirect Labor \$11,700
Indirect Materials 9,360
Factory Repair and Maintenance 910
Manufacturing Equipment Depreciation 2,080
Direct Materials 28,080
Direct Labor $\quad \underline{35,100}$
Total Product Cost $\underline{\underline{\$ 87,230}}$
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
48) The following information relates to Webster Inc.:

| Advertising Costs | $\$ 10,270$ |
| :--- | ---: |
| Sales Salary | 4,500 |
| Sales Revenue | 450,000 |
| President's Salary | 40,300 |
| Office Rent | 61,100 |
| Manufacturing Equipment Depreciation | 2,080 |
| Indirect Materials | 9,360 |
| Indirect Labor | 11,700 |
| Factory Repair and Maintenance | 910 |
| Direct Materials | 28,080 |
| Direct Labor | 35,100 |
| Delivery Vehicle Depreciation | 1,027 |
| Administrative Salaries | 24,700 |

How much was Webster's manufacturing overhead?
A) $\$ 21,060$
B) $\$ 21,970$
C) $\$ 24,050$
D) $\$ 141,897$

Answer: C
Explanation: C)
Indirect Labor \$11,700
Indirect Materials 9,360
Factory Repair and Maintenance 910
Manufacturing Equipment Depreciation $\underline{\underline{2,080}}$
Total Manufacturing Overhead $\$ \underline{\$ 24,050}$
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
49) The following information was obtained from Fizz Inc.:

| Advertising Costs | $\$ 9,900$ |
| :--- | ---: |
| Indirect Labor | 11,000 |
| CEO's Salary | 49,000 |
| Direct Labor | 41,000 |
| Indirect Materials | 7,900 |
| Direct Materials Used | 61,000 |
| Factory Utilities | 700 |
| Factory Janitorial Costs | 2,300 |
| Manufacturing Equipment Depreciation | 2,100 |
| Delivery Vehicle Depreciation | 1,100 |
| Administrative Wages and Salaries | 21,000 |

How much were Fizz's period costs?
A) $\$ 60,000$
B) $\$ 81,000$
C) $\$ 92,000$
D) $\$ 79,900$

Answer: B
Explanation: B)
Advertising Costs \$9,900
CEO's Salary 49,000
Delivery Vehicle Depreciation 1,100
Administrative Wages and Salaries $\underline{21,000}$
Total Period Costs $\underline{\$ 1,000}$
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
50) The following information was obtained from Fizz Inc.:

| Advertising Costs | $\$ 9,900$ |
| :--- | ---: |
| Indirect Labor | 11,000 |
| CEO's Salary | 49,000 |
| Direct Labor | 41,000 |
| Indirect Materials | 7,900 |
| Direct Materials Used | 61,000 |
| Factory Utilities | 700 |
| Factory Janitorial Costs | 2,300 |
| Manufacturing Equipment Depreciation | 2,100 |
| Delivery Vehicle Depreciation | 1,100 |
| Administrative Wages and Salaries | 21,000 |

Calculate Fizz's total product costs.
A) $\$ 126,000$
B) $\$ 104,100$
C) $\$ 127,100$
D) $\$ 115,000$

Answer: A
Explanation: A)
Indirect labor $\$ 11,000$
Direct Labor 41,000
Indirect Materials 7,900
Direct Materials Used 61,000
Factory Utilities 700
Factory Janitorial Costs 2,300
Manufacturing Equipment Depreciation $\underline{\underline{2,100}}$
Total Product Costs
\$126,000
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Measurement
51) Which of the following would be considered a product cost for a manufacturing business?
A) research and development
B) property taxes on the factory
C) advertising
D) delivery costs

Answer: B
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
52) Which of the following would be considered a product cost for a manufacturing business?
A) salary of the sales manager
B) salary of the CEO
C) salaries of the accounting staff
D) salary of the production manager

Answer: D
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
53) Which of the following would be considered a product cost for a manufacturing business?
A) depreciation on delivery vehicles
B) depreciation on administrative building furniture and fixtures
C) depreciation on manufacturing equipment
D) depreciation on the accounting department's computer equipment

Answer: C
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
54) Which of the following would be considered a direct labor cost for a manufacturing business?
A) wages of the assembly line staff
B) wages of the factory janitors
C) wages of the factory manager
D) salaries of the internal auditors

Answer: A
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
55) Which of the following would be included as indirect manufacturing costs for a manufacturing business?
A) sales commissions
B) fuel and maintenance for delivery vehicles
C) wages of the assembly line workers
D) wages of the factory manager

Answer: D
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
56) For decision-making purposes, $\qquad$ costs are often divided into prime costs and conversion costs.
A) fixed costs
B) product costs
C) period costs
D) sunk costs

Answer: B
Diff: 2
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
57) Which of the following would be included as manufacturing overhead for a manufacturing business?
A) direct materials cost
B) indirect materials cost
C) direct labor
D) advertising

Answer: B
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
58) Which of the following would be considered a period cost for a manufacturing business?
A) indirect materials
B) factory utilities
C) direct labor
D) sales salaries

Answer: D
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
59) Which of the following is a prime cost and a conversion cost?
A) manufacturing overhead
B) direct materials
C) direct labor
D) selling expenses

Answer: C
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
60) Which of the following represents the combined sum of direct labor and manufacturing overhead?
A) conversion costs
B) period costs
C) prime costs
D) fixed costs

Answer: A
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
61) Which of the following represents the combined sum of direct materials and direct labor?
A) conversion costs
B) period costs
C) prime costs
D) fixed costs

Answer: C
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
62) Which of the following will be classified as a conversion cost?
A) cost of raw materials
B) depreciation on factory equipment
C) salary of sales personnel
D) depreciation on office furniture

Answer: B
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting
63) Which of the following would be classified as a prime cost?
A) cost of raw materials
B) depreciation on factory equipment
C) salary of sales personnel
D) depreciation on office furniture

Answer: A
Diff: 1
LO: 16-3
AACSB: Application
AICPA Functional: Reporting

## Learning Objective 16-4

1) The cost of goods manufactured includes selling expenses, administrative expenses, and manufacturing overhead.
Answer: FALSE
Diff: 1
LO: 16-4
AACSB: Concept
AICPA Functional: Reporting
2) Merchandiser's inventory consists of raw materials inventory, work-in-process inventory, and finished goods inventory.
Answer: FALSE
Diff: 1
LO: 16-4
AACSB: Concept
AICPA Functional: Reporting
3) Total manufacturing costs to account for during the year minus the ending work-in-process inventory equals the cost of goods manufactured.
Answer: TRUE
Diff: 1
LO: 16-4
AACSB: Concept
AICPA Functional: Reporting
4) Which of the following statements is true of the flow of product and period costs for a manufacturer?
A) When the manufacturing process is completed, the costs are transferred to the Work-in-Process Inventory account.
B) The cost of the finished goods that the manufacturer sells becomes its Cost of Goods Sold on the income statement.
C) Period costs remain in inventory accounts on the balance sheet until the product is sold.
D) All product costs that have been paid are expensed and shown on the income statement at the end of the accounting period.
Answer: B
Diff: 2
LO: 16-4
AACSB: Concept
AICPA Functional: Reporting
5) Goods that are produced by a manufacturing company and are ready to sell are recorded in the
A) Materials Inventory account
B) Work-in-Process Inventory account
C) Manufacturing Overhead account
D) Finished Goods Inventory account

Answer: D
Diff: 1
LO: 16-4
AACSB: Concept
AICPA Functional: Reporting
6) At the beginning of 2015, Swift Inc. Work-in-Process Inventory account had a balance of $\$ 120,000$. During 2015, $\$ 250,000$ of direct materials were used in production, and $\$ 75,000$ of direct labor costs were incurred. Manufacturing overhead amounted to $\$ 850,000$. The cost of goods manufactured was $\$ 675,000$. What is the balance in the Work-in-Process Inventory account on December 31, 2015?
A) $\$ 230,000$
B) $\$ 1,295,000$
C) $\$ 675,000$
D) $\$ 620,000$

Answer: D
Explanation: D)
Beginning Work-in-Process Inventory \$120,000
Direct Materials Used 250,000
Direct Labor $\quad 75,000$
Manufacturing Overhead $\quad \underline{850,000}$
Total Manufacturing Costs To account for 1,295,000
Cost of Goods Manufactured -675,000
Ending Work-in-Process Inventory $\underline{\underline{\$ 620,000}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
7) Selected data for Lemon Grass Inc. for 2015 is provided below:

| Factory Utilities | $\$ 1,500$ |
| :--- | ---: |
| Indirect Materials Used | 37,500 |
| Direct Materials Used | 300,000 |
| Property Taxes on Factory Building | 6,900 |
| Sales Commissions | 85,000 |
| Indirect Labor Incurred | 25,000 |
| Direct Labor Incurred | 150,000 |
| Depreciation on Factory Equipment | 6,500 |

What is the total factory overhead?
A) $\$ 450,000$
B) $\$ 612,000$
C) $\$ 77,400$
D) $\$ 62,400$

Answer: C
Explanation: C)

| Factory Utilities | $\$ 1,500$ |
| :--- | ---: |
| Indirect Materials Used | 37,500 |
| Property Taxes on Factory Building | 6,900 |
| Indirect Labor Incurred | 25,000 |
| Depreciation on Factory Equipment | $\underline{6,500}$ |
| Total Factory Overhead | $\underline{\$ 77,400}$ |

Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
8) Which of the following describes the cost of goods manufactured?
A) the cost of the goods that were sold during the period
B) the total cost of all goods that were completed, or partially completed during the period
C) the cost of those goods which were completed during the period
D) the total costs in inventory at the end of the period

Answer: C
Diff: 2
LO: 16-4
AACSB: Concept
AICPA Functional: Measurement
9) Fireox Inc. selected cost data for 2015 are shown below:

| Cost of Goods Manufactured | $\$ 145,200$ |
| :--- | ---: |
| Work-in-Process Inventory, Jan. 1, 2015 | 18,500 |
| Work-in-Process Inventory, Dec. 31, 2015 | 22,500 |
| Direct Materials Used | 15,800 |

What is the total of manufacturing costs incurred by Fireox Inc. in 2015?
A) $\$ 149,200$
B) $\$ 158,300$
C) $\$ 139,800$
D) $\$ 117,100$

Answer: A
Explanation: A) \$149,200 (Total manufacturing costs incurred) $=\$ 22,500$ (Ending Work-in-Process
Inventory) $+\$ 145,200$ (Cost of Goods Manufactured) - \$18,500 (Beginning Work-in-Process Inventory)
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
10) Fireox Inc. selected cost data for 2015 are shown below:

| Work-in-Process Inventory, Jan. 1, 2015 | $\$ 5,640$ |
| :--- | ---: |
| Direct Materials Used | 105,000 |
| Work-in-Process Inventory, Dec. 31, 2015 | 2,870 |
| Cost of Goods Manufactured | 193,200 |

Assuming manufacturing overhead costs of $\$ 27,850$, what is the amount of direct labor incurred by Fireox Inc.in 2015?
A) $\$ 63,120$
B) $\$ 190,430$
C) $\$ 57,580$
D) $\$ 79,690$

Answer: C
Explanation: C) $\$ 190,430$ (Cost of goods sold) $=\$ 2,870$ (Ending Work-in-Process Inventory) $+\$ 193,200$
(Cost of Goods Manufactured) - \$5,640 (Beginning Work-in-Process Inventory)
$\$ 57,580$ (Direct labor costs) $=\$ 190,430$ (Cost of goods sold) - \$27,850 (Manufacturing overhead costs) \$105,000 (Direct Materials Used)
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
11) Jasper Inc. reports the following cost information for March:

| Cost of Goods Manufactured | $\$ 75,000$ |
| :--- | ---: |
| Manufacturing Overhead | 18,250 |
| Finished Goods Inventory, March 1 | 4,500 |
| Finished Goods Inventory, March 31 | 2,650 |
| Work-in-Process Inventory, March 1 | 9,670 |
| Work-in-Process Inventory, March 31 | 1,250 |
| Direct Materials Used | 25,300 |

What is the cost of goods sold for March?
A) $\$ 83,420$
B) $\$ 73,150$
C) $\$ 76,850$
D) $\$ 82,150$

Answer: C
Explanation: C)
Finished Goods Inventory, March $1 \quad \$ 4,500$

+ Cost of Goods Manufactured 75,000
- Finished Goods Inventory, March $31 \underline{-2,650}$
$=$ Cost of Goods Sold $\underline{\underline{\$ 76,850}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement

12) Jasper Inc. reports the following cost information for March:

| Cost of Goods Manufactured | $\$ 75,000$ |
| :--- | ---: |
| Manufacturing Overhead | 18,250 |
| Finished Goods Inventory, March 1 | 4,500 |
| Finished Goods Inventory, March 31 | 2,650 |
| Work-in-Process Inventory, March 1 | 9,670 |
| Work-in-Process Inventory, March 31 | 1,250 |
| Direct Materials Used | 25,300 |

What is the amount of direct labor incurred by Jasper in March?
A) $\$ 29,600$
B) $\$ 39,870$
C) $\$ 126,970$
D) $\$ 23,030$

Answer: D
Explanation: D)
Cost of Goods Manufactured \$75,000

- Direct Materials Used -25,300
- Manufacturing Overhead -18,250
- Work-in-Process Inventory, March $1 \quad-9,670$
+ Work-in-Process Inventory, March $31 \quad \underline{1,250}$
$=$ Direct Labor $\$ 23,030$
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement

13) Jasper Corporation reports the following cost information for March:

| Cost of Goods Manufactured | $\$ 75,000$ |
| :--- | ---: |
| Manufacturing Overhead | 16,850 |
| Finished Goods Inventory, March 1 | 4,500 |
| Finished Goods Inventory, March 31 | 2,650 |
| Work-in-Process Inventory, March 1 | 9,670 |
| Work-in-Process Inventory, March 31 | 1,250 |
| Direct Labor | 36,300 |

What is the amount of manufacturing overhead incurred by the company in March?
A) $\$ 13,430$
B) $\$ 20,000$
C) $\$ 30,270$
D) $\$ 136,570$

Answer: A
Explanation: A)
Cost of Goods Manufactured \$75,000

- Direct Labor -36,300
- Manufacturing Overhead -16,850
- Work-in-Process Inventory, March $1 \quad-9,670$
+ Work-in-Process Inventory, March $31 \quad \underline{1,250}$
$=$ Manufacturing Overhead Incurred \$13,430
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement

14) Jasper Corporation reports the following cost information for March:

| Cost of Goods Manufactured | $\$ 75,000$ |
| :--- | ---: |
| Manufacturing Overhead | 18,250 |
| Finished Goods Inventory, March 1 | 4,500 |
| Finished Goods Inventory, March 31 | 2,650 |
| Work-in-Process Inventory, March 1 | 9,670 |
| Work-in-Process Inventory, March 31 | 1,250 |
| Direct Labor | 36,300 |

What is the amount of manufacturing overhead incurred by the company in March?
A) $\$ 20,000$
B) $\$ 30,270$
C) $\$ 13,430$
D) $\$ 136,570$

Answer: C
Explanation: C)
Cost of Goods Manufactured \$75,000

- Direct Labor -36,300
- Direct Material Used -16,850
- Work-in-Process Inventory, March $1 \quad-9,670$
+ Work-in-Process Inventory, March $31 \quad \underline{1,250}$
Manufacturing Overhead $\underline{\underline{\$ 13,430}}$
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement

15) A corporation used $\$ 35,000$ of direct materials, incurred $\$ 73,000$ in direct labor cost, and $\$ 114,000$ in manufacturing overhead costs during the period. What is the cost of goods manufactured if the beginning and ending Work-in-Process Inventories were $\$ 28,000$ and $\$ 21,000$, respectively?
A) $\$ 250,000$
B) $\$ 229,000$
C) $\$ 215,000$
D) $\$ 222,000$

Answer: B
Explanation: B) $\$ 229,000$ (Cost of goods manufactured) $=\$ 28,000$ (Beginning Work-in-Process Inventory) $+\$ 35,000$ (Direct Materials) + \$73,000 (Direct Labor Cost) + \$114,000 (Manufacturing Overhead Costs) \$21,000 (Ending Work-in-Process Inventory)
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
16) Given the following information, determine the cost of goods manufactured.

| Direct Labor Incurred | $\$ 63,000$ |
| :--- | ---: |
| Manufacturing Overhead Incurred | 179,500 |
| Direct Materials Used | 150,000 |
| Finished Goods Inventory, $1 / 1 / 2015$ | 197,500 |
| Finished Goods Inventory, $12 / 31 / 2015$ | 221,000 |
| Work-in-Process Inventory, $1 / 1 / 2015$ | 96,500 |
| Work-in-Process Inventory, $12 / 31 / 2015$ | 109,000 |

A) $\$ 243,000$
B) $\$ 380,000$
C) $\$ 867,000$
D) $\$ 160,000$

Answer: B
Explanation: B)
Work-in-Process Inventory, 1/1/2015 \$96,500
Direct Materials Used 150,000
Direct Labor Incurred 63,000
Manufacturing Overhead Incurred 179,500
Work-in-Process Inventory, 12/31/2015 -109,000
Cost of Goods Manufactured $\underline{\underline{380,000}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
17) Given the following information, determine the cost of goods sold.

| Direct Labor Incurred | $\$ 63,000$ |
| :--- | ---: |
| Manufacturing Overhead Incurred | 179,500 |
| Direct Materials Used | 150,000 |
| Finished Goods Inventory, $1 / 1 / 2015$ | 197,500 |
| Finished Goods Inventory, $12 / 31 / 2015$ | 221,000 |
| Work-in-Process Inventory, $1 / 1 / 2015$ | 96,500 |
| Work-in-Process Inventory, $12 / 31 / 2015$ | 109,000 |

A) $\$ 380,000$
B) $\$ 1,016,500$
C) $\$ 356,500$
D) $\$ 414,000$

Answer: C
Explanation: C)
Work-in-Process Inventory, $1 / 1 / 2015 \quad \$ 96,500$
Direct Materials Used 150,000
Direct Labor Incurred 63,000
Manufacturing Overhead Incurred 179,500
Work-in-Process Inventory, 12/31/2015 $\underline{-109,000}$
Cost of Goods Manufactured \$380,000

Finished Goods Inventory, 1/1/2015 \$197,500
Cost of Goods Manufactured 380,000
Finished Goods Inventory, 12/31/2015 $\underline{-221,000}$
Cost of Goods Sold $\quad \$ 356,500$
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
18) The cost of goods sold for Frye Manufacturing in 2015 was $\$ 233,000$. The January 1, 2015, finished goods inventory balance was $\$ 31,600$, and the December 31, 2015, finished goods inventory balance was $\$ 24,200$. Calculate the cost of goods manufactured during 2015.
A) $\$ 288,800$
B) $\$ 233,000$
C) $\$ 225,600$
D) $\$ 240,400$

Answer: C
Explanation: C) $\$ 225,600$ (Cost of goods manufactured) $=\$ 233,000$ (Cost of goods sold) $+\$ 24,200$ (Ending
finished goods inventory) - \$31,600 (Beginning finished goods inventory)
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
19) Which of the following will most likely be considered an indirect material cost for a bakery?
A) spices
B) flour
C) milk
D) eggs

Answer: A
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Reporting
20) The following information has been provided by Squash Corporation:

| Direct Labor | $\$ 6,500$ |
| :--- | ---: |
| Direct Materials Used | 2,550 |
| Raw Materials Purchased | 5,000 |
| Cost of Goods Manufactured | 10,500 |
| Ending Work-in-Process Inventory | 1,200 |
| Corporate Headquarters' Property taxes | 350 |
| Manufacturing Overhead | 510 |

The beginning balance of Work-in-Process Inventory account was $\qquad$ .
A) $\$ 2,400$
B) $\$ 2,140$
C) $\$ 18,860$
D) $\$ 9,560$

Answer: B
Explanation: B) Cost of Goods Manufactured $\$ 10,500$
Direct Labor -6,500
Direct Materials Used -2,550
Manufacturing Overhead
Ending Work-in-Process Inventory $\quad \underline{1,200}$
Beginning Work-in-Process Inventory $\underline{\underline{\$ 2,140}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
21) Barricades Corporation provided the following information for the year 2015:

| Beginning Balance-Work-in-Process Inventory | $\$ 24,000$ |
| :--- | ---: |
| Ending Balance-Work-in-Process Inventory | 56,000 |
| Beginning Balance-Raw Materials Inventory | 84,000 |
| Ending Balance-Raw Materials Inventory | 60,000 |
| Purchases-Raw Materials | 360,000 |
| Direct Labor | 470,000 |
| Indirect Materials | 47,000 |
| Indirect Labor | 19,000 |
| Depreciation on Factory Plant \& Equipment | 24,000 |
| Plant Utilities \& Insurance | 270,000 |

What was the amount of direct materials used in production during 2015?
A) $\$ 360,000$
B) $\$ 504,000$
C) $\$ 384,000$
D) $\$ 328,000$

Answer: C
Explanation: C) Beginning balance-Raw Materials Inventory \$84,000
Purchases-Raw Materials 360,000
Ending Balance-Raw Materials Inventory $\underline{\underline{-60,000}}$
Direct Materials Used
\$384,000
Diff: 1
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
22) Barricades Corporation provided the following information for the year 2015:

| Beginning Balance-Work-in-Process Inventory | $\$ 24,000$ |
| :--- | ---: |
| Ending Balance-Work-in-Process Inventory | 56,000 |
| Beginning Balance-Raw Materials Inventory | 84,000 |
| Ending Balance-Raw Materials Inventory | 60,000 |
| Purchases-Raw Materials | 360,000 |
| Direct Labor | 470,000 |
| Indirect Materials | 47,000 |
| Indirect Labor | 19,000 |
| Depreciation on Factory Plant \& Equipment | 24,000 |
| Plant Utilities \& Insurance | 270,000 |

What was the amount of the manufacturing overhead costs?
A) $\$ 360,000$
B) $\$ 313,000$
C) $\$ 90,000$
D) $\$ 336,000$

Answer: A
Explanation: A)
Plant utilities \& Insurance \$270,000
Depreciation on Factory Plant \& Equipment 24,000
Indirect Labor 19,000
Indirect Materials $\underline{47,000}$
Total Manufacturing Overhead Costs $\underline{\underline{\$ 360,000}}$
Diff: 1
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
23) Barricades Corporation provided the following information for the year 2015:

| Beginning Balance-Work-in-Process Inventory | $\$ 24,000$ |
| :--- | ---: |
| Ending Balance-Work-in-Process Inventory | 56,000 |
| Beginning Balance-Raw Materials Inventory | 84,000 |
| Ending Balance-Raw Materials Inventory | 60,000 |
| Purchases-Raw Materials | 360,000 |
| Direct Labor | 470,000 |
| Indirect Materials | 47,000 |
| Indirect Labor | 19,000 |
| Depreciation on Factory Plant \& Equipment | 24,000 |
| Plant Utilities \& Insurance | 270,000 |

What was the total manufacturing costs incurred during the year 2015?
A) $\$ 744,000$
B) $\$ 360,000$
C) $\$ 1,414,000$
D) $\$ 1,214,000$

Answer: D
Explanation: D)
Beginning Balance-Raw Materials Inventory \$84,000
Purchases-Raw Materials 360,000
Ending Balance-Raw Materials Inventory $\underline{\underline{-60,000}}$
Direct Materials Used $\underline{\underline{\$ 384,000}}$

Plant Utilities \& Insurance \$270,000
Depreciation on Factory Plant \& Equipment 24,000
Indirect Labor 19,000
Indirect Materials $\quad \underline{47,000}$
Total Manufacturing Overhead Costs $\underline{\underline{\$ 360,000}}$

Direct Materials Used \$384,000
Direct Labor 470,000
Manufacturing Overhead $\quad \underline{360,000}$
Total Manufacturing Cost Incurred During Year $\quad \underline{\underline{1,214,000}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
24) Barricades Corporation provided the following information for the year 2015:

| Beginning Balance-Work-in-Process Inventory | $\$ 24,000$ |
| :--- | ---: |
| Ending Balance-Work-in-Process Inventory | 56,000 |
| Beginning Balance-Raw Materials Inventory | 84,000 |
| Ending Balance-Raw Materials Inventory | 60,000 |
| Purchases-Raw Materials | 360,000 |
| Direct Labor | 470,000 |
| Indirect Materials | 47,000 |
| Indirect Labor | 19,000 |
| Depreciation on Factory Plant \& Equipment | 24,000 |
| Plant Utilities \& Insurance | 270,000 |

What was the amount of the cost of goods manufactured for the year 2015?
A) $\$ 1,414,000$
B) $\$ 1,214,000$
C) $\$ 1,182,000$
D) $\$ 1,246,000$

Answer: C
Explanation: C)
Beginning Balance—Raw Materials Inventory \$84,000
Purchases-Raw Materials 360,000
Ending Balance-Raw Materials Inventory $\underline{-60,000}$
Direct Materials Used $\$$

| Plant Utilities \& Insurance | $\$ 270,000$ |
| :--- | ---: |
| Depreciation on Factory Plant \& Equipment | 24,000 |
| Indirect Labor | 19,000 |
| Indirect Materials | $\underline{47,000}$ |
| Total Manufacturing Overhead Costs | $\underline{\$ 360,000}$ |

Direct Materials Used \$384,000
Direct Labor 470,000
Manufacturing Overhead $\quad \underline{360,000}$
Total Manufacturing Cost Incurred During Year $\underline{\underline{\$ 1,214,000}}$

Beginning Balance-Work-in-Process Inventory \$24,000
Total Manufacturing Cost Incurred During Year 1,214,000
Ending Balance-Work-in-Process Inventory $\underline{-56,000}$
Cost of Goods Manufactured $\quad \underline{\underline{1,182,000}}$
Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
25) Viva Inc. has provided the following information for the year 2015:

| Cost of Goods Manufactured | $\$ 1,234,000$ |
| :--- | ---: |
| Beginning Balance-Finished Goods Inventory | 99,000 |
| Ending Balance-Finished Goods Inventory | 84,000 |

How much is the cost of goods sold?
A) $\$ 183,000$
B) $\$ 1,249,000$
C) $\$ 1,234,000$
D) $\$ 1,219,000$

Answer: B
Explanation: B)
Beginning Balance-Finished Goods Inventory \$99,000
Cost of Goods Manufactured 1,234,000
Ending Balance - Finished Goods Inventory $\quad \underline{-84,000}$
Cost of Goods Sold
\$1,249,000
Diff: 1
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
26) Amoeba Manufacturing Inc. provided the following information for the year 2015:

| Purchases-Raw Materials | $\$ 90,000$ |
| :--- | ---: |
| Plant Utilities \& Insurance | 67,500 |
| Indirect Materials | 11,750 |
| Indirect Labor | 4,750 |
| Direct Materials Used in Production | 96,000 |
| Direct Labor | 117,500 |
| Depreciation on Factory Plant \& Equipment | 6,000 |

The inventory account balances as of January $1^{\text {st }} 2015$ are given below.

| Raw Materials Inventory | $\$ 42,000$ |
| :--- | ---: |
| Work-in-Process Inventory | 12,000 |
| Finished Goods Inventory | 49,500 |

What is the ending balance in the Raw Materials Inventory account?
A) $\$ 54,000$
B) $\$ 6,000$
C) $\$ 111,000$
D) $\$ 24,250$

Answer: D
Explanation: D) $\$ 42,000+\$ 90,000-\$ 96,000-\$ 11,750=\$ 24,250$
Diff: 1
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
27) Amoeba Manufacturing Inc. provided the following information for the year 2015:

| Purchases-Raw Materials | $\$ 90,000$ |
| :--- | ---: |
| Plant Utilities \& Insurance | 67,500 |
| Indirect Materials | 11,750 |
| Indirect Labor | 4,750 |
| Direct Materials Used in Production | 96,000 |
| Direct Labor | 117,500 |
| Depreciation on Factory Plant \& Equipment | 6,000 |
| Cost of Goods Manufactured | 290,850 |

The inventory account balances as of January 1st 2015 are given below.

| Raw Materials Inventory | $\$ 42,000$ |
| :--- | ---: |
| Work-in-Process Inventory | 12,000 |
| Finished Goods Inventory | 49,500 |

What is the ending balance in the Work-in-Process Inventory account?
A) $\$ 24,650$
B) $\$ 12,000$
C) $\$ 49,500$
D) $\$ 65,350$

Answer: A
Explanation: A)
Indirect Materials $\quad \$ 11,750$
Indirect Labor 4,750
Depreciation on Factory Plant \& Equipment 6,000
Plant Utilities \& Insurance $\underline{67,500}$
Total Manufacturing Overhead $\underline{\underline{\$ 90,000}}$
Beginning-Work-in-Process Inventory \$12,000
Direct Materials Used in Production 96,000
Direct Labor 117,500
Manufacturing Overhead 90,000
Cost of Goods Manufactured $\underline{-290,850}$
Ending - Work-in-Process Inventory $\underline{\underline{\$ 24,650}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
28) Amoeba Manufacturing Inc. provided the following information for the year 2015:

| Purchases-Raw Materials | $\$ 90,000$ |
| :--- | ---: |
| Plant Utilities \& Insurance | 67,500 |
| Indirect Materials | 11,750 |
| Indirect Labor | 4,750 |
| Direct Materials Used in Production | 96,000 |
| Direct Labor | 117,500 |
| Depreciation on Factory Plant \& Equipment | 6,000 |
| Cost of Goods Manufactured | 290,850 |
| Cost of Goods Sold | 304,550 |

The inventory account balances as of January 1, 2015 are given below.

| Raw Materials Inventory | $\$ 42,000$ |
| :--- | ---: |
| Work-in-Process Inventory | 12,000 |
| Finished Goods Inventory | 49,500 |

What is the ending balance in the finished goods inventory?
A) $\$ 49,500$
B) $\$ 63,200$
C) $\$ 35,800$
D) $\$ 24,650$

Answer: C
Explanation: C)
Beginning Balance-Finished Goods Inventory \$49,500
Cost of Goods Manufactured 290,850
Cost of Goods Sold $\underline{\underline{-304,550}}$
Ending Balance—Finished Goods Inventory $\underline{\underline{\$ 35,800}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
29) The following information has been provided by New Age Inc.:

| Direct Labor | $\$ 25,000$ |
| :--- | ---: |
| Direct Materials Used | 10,000 |
| Raw Materials Purchased | 16,750 |
| Cost of Goods Manufactured | 49,750 |
| Ending Work-in-Process Inventory | 11,500 |
| Corporate Headquarters' Property Taxes | 1,500 |
| Manufacturing Overhead | 19,750 |

Calculate the beginning balance of the Work-in-Process Inventory account.
A) $\$ 5,000$
B) $\$ 10,500$
C) $\$ 6,500$
D) $\$ 16,500$

Answer: C
Explanation: C)
Cost of Goods Manufactured \$49,750
Direct Materials Used -10,000
Direct Labor -25,000
Manufacturing Overhead -19,750
Ending Work-in-Process Inventory $\quad \underline{11,500}$
Beginning Work-in-Process Inventory \$6,500
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
30) Reed Productions has provided the following information for the year 2015:

| Direct Labor | $\$ 153,000$ |
| :--- | ---: |
| Beginning Work-in-Process Inventory | 62,500 |
| Direct Materials Used | 271,000 |
| Ending Work-in-Process Inventory | 53,850 |
| Manufacturing Overhead | 135,500 |

During the year, Reed produced 71,020 units of product. Calculate the unit product cost.
A) $\$ 8.00$
B) $\$ 10.00$
C) $\$ 9.52$
D) $\$ 7.88$

Answer: A
Explanation: A)
Cost of Goods Manufactured

| Beginning Work-in-Process Inventory |  | $\$ 62,500$ |
| :--- | ---: | ---: |
| Direct Materials Used: | $\$ 271,000$ |  |
| Direct Labor | 153,000 |  |
| Manufacturing Overhead | $\underline{135,500}$ |  |
| Total mfg. Costs Incurred |  | $\underline{559,500}$ |
| Total mfg. Costs to Account For | $\underline{622,000}$ |  |
| Ending Work-in-Process Inventory | $\underline{-53,850}$ |  |
| Cost of Goods Manufactured | $\underline{\$ 568,150}$ |  |

Unit product cost $=\$ 568,150 \div 71,020=\$ 8.00$ per unit
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Reporting
31) Evanston Manufacturing Inc. reported the following information for the year 2015:

| Number of Units Produced | 4,800 |
| :--- | ---: |
| Number of Units Sold | 5,250 |
| Cost of Goods Manufactured | $\$ 460,800$ |
| Cost of Goods Sold | $\$ 488,250$ |
| Sales Revenue | $\$ 1,260,000$ |
| Gross Profit | $\$ 771,750$ |
| Operating Expense | $\$ 724,900$ |

What was the unit product cost?
A) $\$ 87.77$
B) $\$ 262.50$
C) $\$ 93.00$
D) $\$ 96.00$

Answer: D
Explanation: D) $\$ 96.00$ (Unit product cost) $=\$ 460,800($ Cost of goods manufactured) $\div 4,800$ units
Diff: 1
LO: 16-4
AACSB: Application
AICPA Functional: Reporting
32) South State Inc. used $\$ 71,000$ of direct materials and incurred $\$ 37,000$ of direct labor costs during 2015. Indirect labor amounted to $\$ 2,700$ while indirect materials used totaled $\$ 1,600$. Other operating costs pertaining to the factory included utilities of $\$ 3,100$; maintenance of $\$ 4,500$; repairs of $\$ 1,800$; depreciation of $\$ 7,900$; and, property taxes of $\$ 2,600$. There was no beginning or ending finished goods inventory, but Work-in-Process inventory began the year with a $\$ 5,500$ balance and ended the year with a $\$ 7,500$ balance.

How much is the cost of goods manufactured?
A) $\$ 124,700$
B) $\$ 130,200$
C) $\$ 137,700$
D) $\$ 132,200$

Answer: B
Explanation: B)
Beginning Work-in-Process Inventory \$5,500
Direct Materials Used 71,000
Direct Labor 37,000
Manufacturing Overhead 24,200
Total Manufacturing Costs Incurred during the Year 132,200
Total Manufacturing Costs to Account For 137,700
Ending Work-in-Process Inventory $\quad \underline{-7,500}$
Cost of Goods Manufactured $\quad \underline{\underline{130,200}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
33) Arturo Manufacturing Inc. provided the following information for the year 2015:

| Beginning Balance-Work-in-Process Inventory | $\$ 12,000$ |
| :--- | ---: |
| Ending Balance-Work-in-Process Inventory | 28,000 |
| Beginning Balance-Raw Materials Inventory | 42,000 |
| Ending Balance-Raw Materials Inventory | 30,000 |
| Purchases-Raw Materials | 180,000 |
| Direct Labor | 235,000 |
| Indirect Materials | 23,500 |
| Indirect Labor | 9,500 |
| Depreciation on Factory Plant \& Equipment | 12,000 |
| Plant Utilities \& Insurance | 135,000 |

How much is the cost of goods manufactured?
A) $\$ 591,000$
B) $\$ 607,000$
C) $\$ 619,000$
D) $\$ 579,000$

Answer: A
Explanation: A)
Beginning Balance-Work-in-Process Inventory \$12,000
Direct Materials Used:
Beginning Balance-Raw Materials Inventory 42,000
Purchases—Raw Materials $\quad \underline{180,000}$
Raw Materials Available for Use 222,000
Ending Balance - Raw Materials Inventory
Direct Materials Used 192,000
Direct Labor 235,000
Manufacturing Overhead $\underline{180,000}$
Total Manufacturing Costs Incurred during the Year $\quad \underline{607,000}$
Total Manufacturing Costs to Account For 619,000
Ending Work-in-Process Inventory $\quad \underline{-28,000}$
Cost of Goods Manufactured $\quad \underline{\underline{\$ 591,000}}$
Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
34) Opal Inc. used $\$ 213,000$ of direct materials and incurred $\$ 111,000$ of direct labor costs during 2015. Indirect labor amounted to $\$ 8,100$ while indirect materials used totaled $\$ 4,800$. Other operating costs pertaining to the factory included utilities of $\$ 9,300$; maintenance of $\$ 13,500$; repairs of $\$ 5,400$; depreciation of $\$ 23,700$; and, property taxes of $\$ 7,800$. There was no beginning or ending finished goods inventory. The Work-in-Process Inventory account reflected a balance of $\$ 16,500$ at the beginning of the period and $\$ 22,500$ at the end of the period.

Required: Prepare a schedule of cost of goods manufactured for Opal Inc. using the format below.

COST OF GOODS MFGD

| Beginning Work-in-Process Inventory |  |  |  |
| :--- | :--- | :--- | :--- |
| Direct Materials Used |  |  |  |
| Direct Labor |  |  |  |
| Manufacturing Overhead: |  |  |  |
| Indirect Labor |  |  |  |
| Indirect Materials |  |  |  |
| Utility Expenses |  |  |  |
| Maintenance |  |  |  |
| Repairs |  |  |  |
| Depreciation |  |  |  |
| Property Taxes |  |  |  |
| Total Manufacturing Overhead |  |  |  |
| Total Manufacturing Costs Incurred <br> during the Year |  |  |  |
| Total Manufacturing Costs to Account <br> For |  |  |  |
| Ending Work-in-Process Inventory |  |  |  |
| Cost of Goods Manufactured |  |  |  |

Answer:

| Beginning Work-in-Process Inventory |  |  | $\$ 16,500$ |
| :--- | ---: | ---: | ---: |
| Direct Materials Used |  | $\$ 213,000$ |  |
| Direct Labor |  | 111,000 |  |
| Manufacturing Overhead: |  |  |  |
| Indirect Labor | $\$ 8,100$ |  |  |
| Indirect Materials | 4,800 |  |  |
| Utility Expenses | 9,300 |  |  |
| Maintenance | 13,500 |  |  |
| Repairs | 5,400 |  |  |
| Depreciation | 23,700 |  |  |
| Property Taxes | $\underline{7,800}$ |  |  |
| Total Manufacturing Overhead |  | $\underline{72,600}$ |  |
| Total Manufacturing Costs Incurred <br> during the Year |  |  | $\underline{396,600}$ |
| Total Manufacturing Costs to Account <br> For |  |  | 413,100 |
| Ending Work-in-Process Inventory |  |  | $\underline{\underline{22,500}}$ |
| Cost of Goods Manufactured |  |  | $\underline{\underline{390,600}}$ |

Diff: 2
LO: 16-4
AACSB: Application
AICPA Functional: Measurement
35) Dreams Manufacturing Inc. provided the following information for the year 2015:

| Purchases-Raw Materials | $\$ 270,000$ |
| :--- | ---: |
| Plant Utilities \& Insurance | 202,500 |
| Indirect Materials | 35,250 |
| Indirect Labor | 14,250 |
| Ending Balance - Work-in-Process Inventory | 42,000 |
| Ending Balance-Raw Materials Inventory | 45,000 |
| Direct Labor | 352,500 |
| Depreciation on Factory Plant \& Equipment | 18,000 |
| Beginning Balance-Work-in-Process Inventory | 18,000 |
| Beginning Balance-Raw Materials Inventory | 63,000 |

Required: Prepare a statement of the cost of goods manufactured using the following format:

| COST OF GOODS MFGD |  |  |  |
| :--- | :--- | :--- | :--- |
| Beginning Work-in-Process Inventory |  |  |  |
| Direct Materials Used: |  |  |  |
| Beginning Raw Materials Inventory |  |  |  |
| Purchases of Raw Materials |  |  |  |
| Raw Materials Available for Use |  |  |  |
| Ending Raw Materials Inventory |  |  |  |
| Direct Materials Used |  |  |  |
| Direct Labor |  |  |  |
| Manufacturing Overhead: |  |  |  |
| Indirect Materials |  |  |  |
| Indirect Labor |  |  |  |
| Depreciation-Plant \& Equip. |  |  |  |
| Plant utilities \& Insurance |  |  |  |
| Total Manufacturing Overhead |  |  |  |
| Total Manufacturing Costs Incurred <br> During the Year |  |  |  |
| Total Manufacturing Costs to Account <br> For |  |  |  |
| Ending Work-in-Process Inventory |  |  |  |
| Cost of Goods Manufactured |  |  |  |

Answer:
Schedule of Cost of Goods Manufactured

| Beginning Work-in-Process Inventory |  |  | $\$ 18,000$ |
| :--- | ---: | ---: | ---: |
| Direct Materials Used |  |  |  |
| Beginning Raw Materials Inventory | $\$ 63,000$ |  |  |
| Purchases of Raw Materials | $\underline{270,000}$ |  |  |
| Raw Materials Available for Use | 333,000 |  |  |
| Ending Raw Materials Inventory | $\underline{-45,000}$ |  | $\$ 288,000$ |
| Direct Materials Used |  | 352,500 |  |
| Direct Labor |  |  |  |
| Manufacturing Overhead | 35,250 |  |  |
| Indirect Materials | 14,250 |  |  |
| Indirect Labor | $\underline{202,500}$ |  |  |
|  <br> Equipment |  | $\underline{270,000}$ |  |
| Plant Utilities \& Insurance |  | $\underline{910,500}$ |  |
| Total Manufacturing Overhead |  |  | $\underline{928,500}$ |
| Total Manufacturing Costs Incurred <br> During the Year | $\underline{92,000}$ |  |  |
| Total Manufacturing Costs to Account <br> For |  |  | $\underline{900}$ |
| Ending Work-in-Process Inventory |  |  |  |
| Cost of Goods Manufactured |  |  |  |

Diff: 3
LO: 16-4
AACSB: Application
AICPA Functional: Measurement

## Learning Objective 16-5

1) Managerial accounting is used in manufacturing and merchandising companies, but not in service companies.
Answer: FALSE
Diff: 1
LO: 16-5
AACSB: Concept
AICPA Functional: Measurement
2) Service companies do not have product costs so they often consider all operating expenses as part of their cost of service.
Answer: TRUE
Diff: 1
LO: 16-5
AACSB: Concept
AICPA Functional: Measurement
3) Managerial accounting can be used to calculate costs for service and merchandising companies.

Answer: TRUE
Diff: 1
LO: 16-5
AACSB: Concept
AICPA Functional: Measurement
4) A merchandiser need not calculate cost per unit as it resells goods that are already manufactured. Answer: FALSE
Diff: 1
LO: 16-5
AACSB: Concept
AICPA Functional: Measurement
5) Cost per service is calculated by dividing total costs by total number of services provided.

Answer: TRUE
Diff: 1
LO: 16-5
AACSB: Concept
AICPA Functional: Measurement
6) Nurix Inc. is a business consulting firm. During the month of February, Nurix earned $\$ 55,400$ of revenues by providing services to 45 clients. Operating expenses for February were $\$ 8,500$ and nonoperating expenses were $\$ 4,500$.
What is the cost per service?
A) $\$ 100.00$
B) $\$ 188.89$
C) $\$ 942.22$
D) $\$ 288.00$

Answer: B
Explanation: B) $\$ 188.89$ (Cost per service) $=\$ 8,500$ (Operating expenses) $\div 45$ Clients
Diff: 1
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
7) Samson Inc. reported the following information for the year 2015:

| Service Revenue | $\$ 40,000$ |
| :--- | ---: |
| Operating Expenses | $\$ 23,625$ |
| Net Income | $\$ 16,375$ |
| Number of Services Provided for the Year | 10,500 |

How much was the unit cost per service?
A) $\$ 1.56$
B) $\$ 3.20$
C) $\$ 2.25$
D) $\$ 3.81$

Answer: C
Explanation: C) $\$ 2.25$ (Cost per service) $=\$ 23,625($ Operating Expenses) $\div 10,500$ Services
Diff: 1
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
8) Crystal Inc. is a merchandiser of stone ornaments. The company sold 15,000 units in 2015. The company has provided the following information:

| Sales Revenue | $\$ 557,000$ |
| :--- | ---: |
| Purchases (excluding freight in) | 300,000 |
| Selling and Administrative Expenses | 69,000 |
| Freight In | 15,000 |
| Beginning Merchandise Inventory | 45,000 |
| Ending Merchandise Inventory | 55,700 |

What is the cost per unit sold?
A) $\$ 20.29$
B) $\$ 15.00$
C) $\$ 23.88$
D) $\$ 12.25$

Answer: A
Explanation: A)
Purchases (excluding freight in) \$300,000
Freight In 15,000
Beginning Merchandise Inventory 45,000
Ending Merchandise Inventory -55,700
Cost of Goods Sold
\$ 304,300

Cost per unit sold $=\$ 304,300 \div 15,000$ units $=\$ 20.29$
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Measurement
9) Five Seasons is a merchandiser of packed foods. The company provides the following information for the year 2015:

| Sales Revenue | $\$ 140,000$ |
| :--- | ---: |
| Cost of Goods Sold | $\$ 63,000$ |
| Operating Expenses | $\$ 67,500$ |
| Net Income | $\$ 9,500$ |
| Number of Units Sold | 27,000 |

How much was the unit cost per unit of product sold?
A) $\$ 3.14$
B) $\$ 5.18$
C) $\$ 2.33$
D) $\$ 0.82$

Answer: C
Explanation: C) $\$ 2.33$ (Cost per unit of product sold) $=\$ 63,000($ Cost of Goods Sold $) \div 27,000$ units Diff: 1
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
10) Fuchsia Inc. provides automobile repair services in the local community. The company provides the following information for the month of March:

| Building Rent Expense | $\$ 5,000$ |
| :--- | ---: |
| Depreciation Expense-Equipment | 1,700 |
| Supplies Expense | 8,500 |
| Utilities Expense | 2,450 |

Fuchsia provided services to 1,500 clients in the month of March and generated \$20,500 as revenue.
How much is the cost per service?
A) $\$ 11.77$
B) $\$ 5.18$
C) $\$ 13.67$
D) $\$ 10.63$

Answer: A
Explanation: A) $\$ 11.77$ (Cost per service) $=\$ 17,650$ (Total costs) $\div 1,500$ services
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
11) Star Health Inc. is a fitness center in Oklahoma City. In October, the company earned $\$ 550,000$ in revenues and incurred the following operating costs from 340 customers:

| Manager's salary | $\$ 50,000$ |
| :--- | ---: |
| Gym Rent | 60,000 |
| Depreciation Expense-Equipment | 25,000 |
| Office Supplies | 30,000 |
| Utilities Expense | 89,700 |
| Trainer's Salary | 25,000 |

How much is the unit cost per customer service?
A) $\$ 795.00$
B) $\$ 749.12$
C) $\$ 1,617.65$
D) $\$ 822.65$

Answer: D
Explanation: D)
Manager's salary \$50,000
Gym Rent 60,000
Depreciation Expense-Equipment 25,000
Office Supplies 30,000
Utilities Expense 89,700
Trainer's Salary $\underline{\mathbf{2 5 , 0 0 0}}$
Total Operating Expenses $\underline{\underline{\$ 279,700}}$
$\$ 822.65$ (Cost per service) $=\$ 279,700 \div 340$ customers
Diff: 1
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
12) Kentucky Inc. purchases and sells widgets. The following information summarizes the company's operating activities for 2015:

| Selling and Administrative Expenses | $\$ 4,500$ |
| :--- | ---: |
| Purchases | 157,000 |
| Sales Revenue | 785,000 |
| Merchandise Inventory, January 1, 2015 | 38,250 |
| Merchandise Inventory, December 31, 2015 | 79,000 |

If the company sold 7,500 units of widgets during 2015, how much is the cost for one widget?
A) $\$ 50.00$
B) $\$ 15.50$
C) $\$ 26.36$
D) $\$ 16.10$

Answer: B
Explanation: B)
Merchandise Inventory, January 1, 2015 \$38,250
Purchases 157,000
Merchandise Inventory, December 31, $2015 \quad \underline{-79,000}$
Total cost of goods sold

Per unit cost $=\$ 116,250 \div 7,500$ units $=\$ 15.50$
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Reporting
13) Crystal Inc. is a merchandiser of stone ornaments. The company sold 15,000 units in 2015 . The company has provided the following information:

| Sales Revenue | $\$ 557,000$ |
| :--- | ---: |
| Purchases (excluding freight in) | 300,000 |
| Selling and Administrative Expenses | 69,000 |
| Freight In | 15,000 |
| Beginning Merchandise Inventory | 45,000 |
| Ending Merchandise Inventory | 55,700 |

What is the cost of goods available for sale for 2015?
A) $\$ 360,000$
B) $\$ 304,300$
C) $\$ 345,000$
D) $\$ 330,000$

Answer: A
Explanation: A) $\$ 360,000$ (Cost of goods available for sale) $=\$ 45,000$ (Beginning Merchandise Inventory) + \$300,000 (Purchases) + \$15,000 (Freight In)
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Measurement
14) Crystal Inc. is a merchandiser of stone ornaments. The company sold 15,000 units in 2015. The company has provided the following information:

| Sales Revenue | $\$ 557,000$ |
| :--- | ---: |
| Purchases (excluding freight in) | 300,000 |
| Selling and Administrative Expenses | 69,000 |
| Freight In | 15,000 |
| Beginning Merchandise Inventory | 45,000 |
| Ending Merchandise Inventory | 55,700 |

What is the cost of goods sold for 2015?
A) $\$ 360,000$
B) $\$ 304,300$
C) $\$ 358,300$
D) $\$ 330,000$

Answer: B
Explanation: B) \$304,300 (Cost of goods sold) = \$45,000 (Beginning Merchandise Inventory) + \$300,000
(Purchases) + \$15,000 (Freight In) - \$55,700 (Ending Merchandise Inventory)
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Measurement
15) Crabapples Inc. purchases and sells dry fruit boxes. The following information summarizes its operating activities for 2015:

| Selling Expenses | $\$ 9,375$ |
| :--- | ---: |
| Inventory on December 31, 2015 | 32,500 |
| Inventory on January 1, 2015 | 46,875 |
| Purchases of merchandise | 84,375 |
| Rent for store | 12,500 |
| Sales commissions | 7,031 |
| Sales revenue | 168,750 |

What is the cost per box of dry fruits if Crabapples sold 5,000 boxes of dry fruits during the year?
A) $\$ 72.28$
B) $\$ 32.75$
C) $\$ 10.55$
D) $\$ 19.75$

Answer: D
Explanation: D)
Inventory on January 1, $2015 \quad \$ 46,875$
Purchases of Merchandise 84,375
Inventory on December 31, $2015 \underline{-32,500}$
Cost of Goods Sold $\underline{\underline{\$ 98,750}}$

Cost per box $=\$ 98,750 \div 5,000$ boxes $=\$ 19.75$
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Measurement
16) Crystal Inc. is a merchandiser of stone ornaments. The company sold 15,000 units in 2015 . The company has provided the following information:

| Sales Revenue | $\$ 557,000$ |
| :--- | ---: |
| Purchases (excluding freight in) | 300,000 |
| Selling and Administrative Expenses | 69,000 |
| Freight In | 15,000 |
| Beginning Merchandise Inventory | 45,000 |
| Ending Merchandise Inventory | 55,700 |

What is the operating income for 2015 ?
A) $\$ 183,700$
B) $\$ 304,300$
C) $\$ 252,700$
D) $\$ 257,000$

Answer: A
Explanation: A) \$304,300 (Cost of Goods Sold) $=\$ 45,000$ (Beginning Merchandise Inventory) $+\$ 300,000$
(Purchases) + \$15,000 (Freight In) - \$55,700 (Ending Merchandise Inventory)
$\$ 183,700$ (Operating Income) = \$557,000 (Sales Revenue) - \$304,300 (Cost of Goods Sold) - \$69,000
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Measurement
17) Star Health Inc. is a fitness center in Oklahoma City. In October, the company earned $\$ 550,000$ in revenues and incurred the following operating costs from 340 customers:

| Manager's salary | $\$ 50,000$ |
| :--- | ---: |
| Gym Rent | 60,000 |
| Depreciation Expense-Equipment | 25,000 |
| Office Supplies | 30,000 |
| Utilities Expense | 89,700 |
| Trainer's Salary | 25,000 |

Required: Prepare Star Health's income statement for the month of October.
Answer: Revenue
Service Revenue \$550,000
Expenses
Manager's salary \$50,000
Gym Rent 60,000
Depreciation Expense—Equipment 25,000
Office Supplies 30,000
Utilities Expense 89,700
Trainer's Salary $\underline{25,000}$
Total Expenses $\underline{279,700}$
Operating Income $\underline{\underline{\$ 270,300}}$
Diff: 2
LO: 16-5
AACSB: Application
AICPA Functional: Reporting

