

## Chapter 2--Cost Terminology and Cost Behaviors

Student: \_\_\_\_\_

1. A cost object is anything for which management wants to collect or accumulate costs.

True   False

2. A production plant could be a cost object.

True   False

3. A specific product **cannot** be a cost object

True   False

4. The portion of an asset's value on the balance sheet is referred to as an expired cost.

True   False

5. The portion of an asset that was consumed during a period is referred to an expired cost.

True   False

6. A variable cost remains constant on a per-unit basis as production increases

True   False

7. A fixed cost remains constant on a per-unit basis as production changes.

True   False

8. The relevant range is valid for all levels of activity

True   False

9. An indirect cost can be easily traced to a cost object.

True   False

10. Both accountants and economists view variable costs as linear in nature.

True False

11. Fixed cost per unit varies directly with production.

True False

12. Variable cost per unit remains constant within the relevant range.

True False

13. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a mixed cost.

True False

14. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a step cost.

True False

15. If the cost of an additive is  $\$5,000 + \$0.50$  for every unit of solvent produced, the cost is classified as a mixed cost.

True False

16. If the cost of an additive is  $\$5,000 + \$0.50$  for every unit of solvent produced, the cost is classified as a step cost.

True False

17. A predictor which has an absolute cause and effect relationship to a cost is referred to a cost driver.

True False

18. A mixed cost will be an effective cost driver.

True False

19. A variable cost will be an effective cost driver.

True False

20. Unexpired costs are reflected on the balance sheet.

True False

21. Expired costs are reflected on the balance sheet.

True False

22. Distribution costs are an example of product costs.

True False

23. Distribution costs are an example of period costs.

True False

24. Retailers generally have a much higher degree of conversion than do manufacturing or professional firms.

True False

25. Retailers generally have a much lower degree of conversion than do manufacturing or professional firms.

True False

26. In a service industry, direct materials are usually insignificant in amount and **cannot** easily be traced to a cost object.

True False

27. In a service industry, direct materials are usually significant in amount and can be easily traced to a cost object.

True False

28. There is an inverse relationship between prevention costs and failure costs.

True False

29. There is a direct relationship between prevention costs and failure costs.

True False

30. In an actual cost system, actual production overhead costs are accumulated in an Overhead Control account and assigned to Work in Process at the end of the period.

True False

31. In an normal cost system, actual production overhead costs are accumulated in an Overhead Control account and assigned to Work in Process at the end of the period.

True False

32. In a normal cost system, factory overhead is applied to Work in Process using a predetermined overhead rate.

True False

33. In an actual cost system, factory overhead is applied to Work in Process using a predetermined overhead rate.

True False

34. In an actual cost system, overhead is assigned to Work in Process Inventory with a debit entry to the account.

True False

35. In an actual cost system, overhead is assigned to Work in Process Inventory with a credit entry to the account.

True False

36. It is not necessary to prepare the Cost of Goods Manufactured statement prior to preparing the Cost of Goods Sold statement.

True False

37. Anything for which management wants to accumulate or collect costs is known as a

\_\_\_\_\_.

\_\_\_\_\_

38. Costs that can be conveniently traced to a cost object are referred to as \_\_\_\_\_ costs.

\_\_\_\_\_

39. Costs that **cannot** be conveniently traced to a cost object are known as \_\_\_\_\_ costs.

\_\_\_\_\_

40. A cost that remains unchanged in total within the relevant range is known as a \_\_\_\_\_ cost.

\_\_\_\_\_

41. A cost that varies in total in direct proportion to changes in activity is known as a \_\_\_\_\_ cost

\_\_\_\_\_

42. The assumed range of activity that reflects the company's normal operating range is referred to as the \_\_\_\_\_.

\_\_\_\_\_

43. A cost that remains constant on a per unit basis within the relevant range is a \_\_\_\_\_ cost.

\_\_\_\_\_

44. A cost that varies inversely with the level of production is known as a \_\_\_\_\_ cost.

\_\_\_\_\_

45. A cost that has both fixed and variable components is known as a \_\_\_\_\_ cost.

\_\_\_\_\_

46. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a \_\_\_\_\_ cost.

\_\_\_\_\_

47. Another name for inventoriable costs is \_\_\_\_\_ costs.

\_\_\_\_\_

48. The three stages of production for a manufacturing firm are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

\_\_\_\_\_

49. Costs that are incurred to improve quality by precluding defects and improper processing are referred to as \_\_\_\_\_ costs.

\_\_\_\_\_

50. Costs incurred for monitoring or inspecting products are known as \_\_\_\_\_ costs.

\_\_\_\_\_

51. Costs that result from defective units, product returns, and complaints are referred to as \_\_\_\_\_ costs.

\_\_\_\_\_

52. The term "relevant range" as used in cost accounting means the range over which

- A. costs may fluctuate.
- B. cost relationships are valid.
- C. production may vary.
- D. relevant costs are incurred.

53. Which of the following defines variable cost behavior?

Total cost reaction  
to increase in activity

Cost per unit reaction  
to increase in activity

- |                     |                  |
|---------------------|------------------|
| A. remains constant | remains constant |
| B. remains constant | increases        |
| C. increases        | increases        |
| D. increases        | remains constant |

54. When cost relationships are linear, total variable prime costs will vary in proportion to changes in

- A. direct labor hours.
- B. total material cost.
- C. total overhead cost.
- D. production volume.

55. Which of the following would generally be considered a fixed factory overhead cost?

| <u>Straight-line</u><br><u>depreciation</u> | <u>Factory</u><br><u>insurance</u> | <u>Units-of-production</u><br><u>depreciation</u> |
|---------------------------------------------|------------------------------------|---------------------------------------------------|
|---------------------------------------------|------------------------------------|---------------------------------------------------|

- |    |     |     |     |
|----|-----|-----|-----|
| A. | no  | no  | no  |
| B. | yes | no  | yes |
| C. | yes | yes | no  |
| D. | no  | yes | no  |

56. An example of a fixed cost is

- A. total indirect material cost.
- B. total hourly wages.
- C. cost of electricity.
- D. straight-line depreciation.

57. A cost that remains constant in total but varies on a per-unit basis with changes in activity is called a(n)

- A. expired cost.
- B. fixed cost.
- C. variable cost.
- D. mixed cost.

58. A(n) \_\_\_\_\_ cost increases or decreases in intervals as activity changes.

- A. historical cost
- B. fixed cost
- C. step cost
- D. budgeted cost

59. When the number of units manufactured increases, the most significant change in unit cost will be reflected as a(n)

- A. increase in the fixed element.
- B. decrease in the variable element.
- C. increase in the mixed element.
- D. decrease in the fixed element.

60. Which of the following always has a direct cause-effect relationship to a cost?

Predictor

Cost driver

- |        |     |
|--------|-----|
| A. yes | yes |
| B. yes | no  |
| C. no  | yes |
| D. no  | no  |

61. A cost driver

- A. causes fixed costs to rise because of production changes.
- B. has a direct cause-effect relationship to a cost.
- C. can predict the cost behavior of a variable, but not a fixed, cost.
- D. is an overhead cost that causes distribution costs to change in distinct increments with changes in production volume.

62. Product costs are deducted from revenue

- A. as expenditures are made.
- B. when production is completed.
- C. as goods are sold.
- D. to minimize taxable income.

63. A selling cost is a(n)

product cost

period cost

inventoriable cost

- |        |     |     |
|--------|-----|-----|
| A. yes | yes | no  |
| B. yes | no  | no  |
| C. no  | yes | no  |
| D. no  | yes | yes |

64. Which of the following is **not** a product cost component?

- A. rent on a factory building
- B. indirect production labor wages
- C. janitorial supplies used in a factory
- D. commission on the sale of a product

65. Period costs

- A. are generally expensed in the same period in which they are incurred.
- B. are always variable costs.
- C. remain unchanged over a given period of time.
- D. are associated with the periodic inventory method.

66. Period costs include

distribution costs

outside processing costs

sales commissions

- |        |     |     |
|--------|-----|-----|
| A. yes | no  | yes |
| B. no  | yes | yes |
| C. no  | no  | no  |
| D. yes | yes | yes |

67. The three primary inventory accounts in a manufacturing company are

- A. Merchandise Inventory, Supplies Inventory, and Finished Goods Inventory.
- B. Merchandise Inventory, Work in Process Inventory, and Finished Goods Inventory.
- C. Supplies Inventory, Work in Process Inventory, and Finished Goods Inventory.
- D. Raw Material Inventory, Work in Process Inventory, and Finished Goods Inventory.

68. Cost of Goods Sold is an

- A. unexpired product cost.
- B. expired product cost.
- C. unexpired period cost.
- D. expired period cost.

69. The indirect costs of converting raw material into finished goods are called

- A. period costs.
- B. prime costs.
- C. overhead costs.
- D. conversion costs.

70. Which of the following would need to be allocated to a cost object?

- A. direct material
- B. direct labor
- C. direct production costs
- D. indirect production costs

71. Conversion cost does **not** include

- A. direct labor.
- B. direct material.
- C. factory depreciation.
- D. supervisors' salaries.

72. The distinction between direct and indirect costs depends on whether a cost

- A. is controllable or non-controllable.
- B. is variable or fixed.
- C. can be conveniently and physically traced to a cost object under consideration.
- D. will increase with changes in levels of activity.

73. Langley Company is a construction company that builds houses on special request. What is the proper classification of the carpenters' wages?

| <u>Product</u> | <u>Period</u> | <u>Direct</u> |
|----------------|---------------|---------------|
|----------------|---------------|---------------|

- |        |     |     |
|--------|-----|-----|
| A. yes | yes | no  |
| B. yes | no  | yes |
| C. no  | no  | no  |
| D. no  | yes | yes |

74. Langley Company is a construction company that builds houses on special request. What is the proper classification of the cost of the cement building slab used?

| <u>Direct</u> | <u>Fixed</u> |
|---------------|--------------|
|---------------|--------------|

- |        |     |
|--------|-----|
| A. no  | no  |
| B. no  | yes |
| C. yes | yes |
| D. yes | no  |

75. Langley Company is a construction company that builds houses on special request. What is the proper classification of indirect material used?

| <u>Prime</u> | <u>Conversion</u> | <u>Variable</u> |
|--------------|-------------------|-----------------|
|--------------|-------------------|-----------------|

- |        |     |     |
|--------|-----|-----|
| A. no  | no  | no  |
| B. no  | yes | yes |
| C. yes | yes | yes |
| D. yes | no  | no  |

76. Which of the following costs would be considered overhead in the production of chocolate chip cookies?

- A. flour
- B. chocolate chips
- C. sugar
- D. oven electricity

77. All costs related to the manufacturing function in a company are

- A. prime costs.
- B. direct costs.
- C. product costs.
- D. conversion costs.

78. Prime cost consists of

| <u>direct material</u> | <u>direct labor</u> | <u>overhead</u> |
|------------------------|---------------------|-----------------|
|------------------------|---------------------|-----------------|

- |        |     |     |
|--------|-----|-----|
| A. no  | yes | no  |
| B. yes | yes | no  |
| C. yes | no  | yes |
| D. no  | yes | yes |

79. Plastic used to manufacture dolls is a

| <u>prime cost</u> | <u>product cost</u> | <u>direct cost</u> | <u>fixed cost</u> |
|-------------------|---------------------|--------------------|-------------------|
|-------------------|---------------------|--------------------|-------------------|

- |        |     |     |     |
|--------|-----|-----|-----|
| A. no  | yes | yes | yes |
| B. yes | no  | yes | no  |
| C. yes | yes | no  | yes |
| D. yes | yes | yes | no  |

80. The term "prime cost" refers to

- A. all manufacturing costs incurred to produce units of output.
- B. all manufacturing costs other than direct labor and raw material costs.
- C. raw material purchased and direct labor costs.
- D. the raw material used and direct labor costs.

81. Conversion of inputs to outputs is recorded in the

- A. Work in Process Inventory account.
- B. Finished Goods Inventory account.
- C. Raw Material Inventory account.
- D. both a and b.

82. In a perpetual inventory system, the sale of items for cash consists of two entries. One entry is a debit to Cash and a credit to Sales. The other entry is a debit to

- A. Work in Process Inventory and a credit to Finished Goods Inventory.
- B. Finished Goods Inventory and a credit to Cost of Goods Sold.
- C. Cost of Goods Sold and a credit to Finished Goods Inventory.
- D. Finished Goods Inventory and a credit to Work in Process Inventory.

83. The formula to compute cost of goods manufactured is

- A. beginning Work in Process Inventory plus purchases of raw material minus ending Work in Process Inventory.
- B. beginning Work in Process Inventory plus direct labor plus direct material used plus overhead incurred minus ending Work in Process Inventory.
- C. direct material used plus direct labor plus overhead incurred.
- D. direct material used plus direct labor plus overhead incurred plus beginning Work in Process Inventory.

84. The final figure in the Schedule of Cost of Goods Manufactured represents the

- A. cost of goods sold for the period.
- B. total cost of manufacturing for the period.
- C. total cost of goods started and completed this period.
- D. total cost of goods completed for the period.

85. The formula for cost of goods sold for a manufacturer is

- A. beginning Finished Goods Inventory plus Cost of Goods Manufactured minus ending Finished Goods Inventory.
- B. beginning Work in Process Inventory plus Cost of Goods Manufactured minus ending Work in Process Inventory.
- C. direct material plus direct labor plus applied overhead.
- D. direct material plus direct labor plus overhead incurred plus beginning Work in Process Inventory.

86. Which of the following replaces the retailing component "Purchases" in computing Cost of Goods Sold for a manufacturing company?

- A. direct material used
- B. cost of goods manufactured
- C. total prime cost
- D. cost of goods available for sale

87. Costs that are incurred to preclude defects and improper processing are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

88. Costs that are incurred for monitoring and inspecting are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

89. Costs that are incurred when customers complain are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

## 90. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. The cost of raw material purchased during the year was

- A. \$316.
- B. \$336.
- C. \$360.
- D. \$411.

## 91. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Direct labor cost charged to production during the year was

- A. \$135.
- B. \$216.
- C. \$225.
- D. \$360.

## 92. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Cost of Goods Manufactured was

- A. \$636.
- B. \$716.
- C. \$736.
- D. \$766.

## 93. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Cost of Goods Sold was

- A. \$691.
- B. \$716.
- C. \$736.
- D. \$801.

**94. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is \$9.60 per hour and overhead for the month was \$9,600. Compute total manufacturing costs for June, if there were 1,500 direct labor hours and \$21,000 of raw material was purchased.

- A. \$58,500
- B. \$46,500
- C. \$43,500
- D. \$43,100

**95. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. What are prime costs and conversion costs, respectively if there were 1,500 direct labor hours and \$21,000 of raw material was purchased?

- A. \$29,100 and \$33,900
- B. \$33,900 and \$24,000
- C. \$33,900 and \$29,100
- D. \$24,000 and \$33,900

**96. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. If there were 1,500 direct labor hours and \$21,000 of raw material purchased, Cost of Goods Manufactured is:

- A. \$49,100.
- B. \$45,000.
- C. \$51,000.
- D. \$49,500.

**97. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. If there were 1,500 direct labor hours and \$21,000 of raw material purchased, how much is Cost of Goods Sold?

- A. \$64,500.
- B. \$59,800.
- C. \$38,800.
- D. \$53,800.

98. Steelman Company manufactures desks. The beginning balance of Raw Material Inventory was \$4,500; raw material purchases of \$29,600 were made during the month. At month end, \$7,700 of raw material was on hand. Raw material used during the month was

- A. \$26,400.
- B. \$34,100.
- C. \$37,300.
- D. \$29,600.

99. Legend Company manufactures tables. If raw material used was \$80,000 and Raw Material Inventory at the beginning and end of the period, respectively, was \$17,000 and \$21,000, what was amount of raw material was purchased?

- A. \$76,000
- B. \$118,000
- C. \$84,000
- D. \$101,000

100. Morris Company manufactures computer stands. What is the beginning balance of Finished Goods Inventory if Cost of Goods Sold is \$107,000; the ending balance of Finished Goods Inventory is \$20,000; and Cost of Goods Manufactured is \$50,000 less than Cost of Goods Sold?

- A. \$70,000
- B. \$77,000
- C. \$157,000
- D. \$127,000

### 101. Long Enterprises

| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
|-------------------------------------|----------------|-----------------|
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, prime cost incurred was

- A. \$75,000.
- B. \$69,000.
- C. \$45,000.
- D. \$39,000.

### 102. Long Enterprises

| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
|-------------------------------------|----------------|-----------------|
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, conversion cost incurred was

- A. \$30,000.
- B. \$40,000.
- C. \$70,000.
- D. \$72,000.

### 103. Long Enterprises

|                                     |                |                 |
|-------------------------------------|----------------|-----------------|
| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, Cost of Goods Manufactured was

- A. \$118,000.
- B. \$115,000.
- C. \$112,000.
- D. \$109,000.

104. Define relevant range and explain its significance.

105. Define a variable cost and a fixed cost. What causes changes in these costs? Give two examples of each.

106. What is the difference between a product cost and a period cost? Give three examples of each. What is the difference between a direct cost and indirect cost? Give two examples of each.

107. What are three reasons that overhead must be allocated to products?

108. Why should predetermined overhead rates be used?

109. List and explain three types of quality costs.

110. Given the following information for Graves Corporation, prepare the necessary journal entries, assuming that the Raw Material Inventory account contains both direct and indirect material.

- a. Purchased raw material on account \$28,500.
- b. Put material into production: \$15,000 of direct material and \$3,000 of indirect material.
- c. Accrued payroll of \$90,000, of which 70 percent was direct and the remainder was indirect.
- d. Incurred and paid other overhead items of \$36,000.
- e. Transferred items costing \$86,500 to finished goods.
- f. Sold goods costing \$71,300 on account for \$124,700.

111. Prepare a Schedule of Cost of Goods Manufactured (in good form) for the Chandler Company from the following information for June 20X8:

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$ 6,700         | \$ 8,900      |
| Work in Process    | 17,700           | 22,650        |
| Finished Goods     | 29,730           | 19,990        |

Additional information: purchases of raw material were \$46,700; 19,700 direct labor hours were worked at \$11.30 per hour; overhead costs were \$33,300.

112. In June 20X8, the Evans Company has Cost of Goods Manufactured of \$296,000; beginning Finished Goods Inventory of \$29,730; and ending Finished Goods Inventory of \$19,990. Prepare an income statement in good form. (Ignore taxes.) The following additional information is available:

|                         |           |
|-------------------------|-----------|
| Selling Expenses        | \$ 40,500 |
| Administrative Expenses | 19,700    |
| Sales                   | 475,600   |

113. The following information is for the Cameron Manufacturing Company for November.

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$17,400         | \$13,200      |
| Work in Process    | 31,150           | 28,975        |
| Finished Goods     | 19,200           | 25,500        |

Direct Labor (21,000 DLH @ \$13)

|                         |           |                            |       |
|-------------------------|-----------|----------------------------|-------|
| Raw Material Purchases  | \$120,000 | Insurance-Office           | 2,570 |
| Indirect Labor          | 11,200    | Office Supplies Expense    | 900   |
| Factory Supplies Used   | 350       | Insurance-Factory          | 1,770 |
| Other Expenses:         |           | Depr. Office Equipment     | 3,500 |
| Depr.-Factory Equipment | 17,300    | Repair/Maintenance-Factory | 7,400 |

Calculate total manufacturing costs, cost of goods manufactured, and cost of goods sold.

114. From the following information for the Seabrook Company, compute prime costs and conversion costs.

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$ 9,900         | \$ 7,600      |
| Work in Process    | 44,500           | 37,800        |
| Finished Goods     | 36,580           | 61,300        |

Raw material purchased during the period cost \$40,800; overhead incurred and paid or accrued for the period was \$21,750; and 23,600 direct labor hours were incurred at a rate of \$13.75 per hour.

115. The following miscellaneous data has been collected for a manufacturing company for the most recent year-end:

| Inventories:                    | <u>Beginning</u> | <u>Ending</u> |
|---------------------------------|------------------|---------------|
| Raw material                    | \$50,000         | \$55,000      |
| Work in process                 | 40,000           | 45,000        |
| Finished goods                  | 60,000           | 50,000        |
| Costs recorded during the year: |                  |               |
| Purchases of raw material       | \$195,000        |               |
| Direct labor                    | 150,000          |               |
| Cost of goods sold              | 595,000          |               |

**Required:** Prepare a cost of goods manufactured statement showing how *all* unknown amounts were determined.

116. The following information was taken from the records of the Beaumont Corporation for the month of July. (There were no inventories of work in process or finished goods on July 1.)

| <u>Units</u>                 | <u>Cost</u> |        |
|------------------------------|-------------|--------|
| Sales 8,000                  | \$ ?        |        |
| during                       |             |        |
| month                        |             |        |
| Manuf                        |             |        |
| acturin                      |             |        |
| g costs                      |             |        |
| for                          |             |        |
| month:                       |             |        |
| Direct material              |             | 32,000 |
| Direct labor                 |             | 20,000 |
| Overhead costs applied       |             | 15,000 |
| Overhead costs under-applied |             | 800    |
| Invent                       |             |        |
| ories,                       |             |        |
| July                         |             |        |
| 31:                          |             |        |
| Work in process              | 1,000       | ?      |
| Finished goods               | 2,000       | ?      |

Indirect manufacturing costs are applied on a direct labor cost basis. The under-applied balance is due to seasonal variations and will be carried forward. The following cost estimates have been submitted for the work in process inventory of July 31: material, \$3,000; direct labor, \$2,000.

**Required:**

- Determine the number of units that were completed and transferred to finished goods during the month.
- Complete the estimate of the cost of work in process on July 31.
- Compute cost of goods manufactured for the month.
- Determine the cost of each unit completed during the month.
- Determine the total amount debited to the Overhead Control accounts during the month.

117. The Sherwood Groves Corporation had the following account balances:

| Raw Material | Manufacturing Overhead |  |   |  |  |         |  |   |
|--------------|------------------------|--|---|--|--|---------|--|---|
| Bal. 1/1     | 30,000                 |  | ? |  |  | 385,000 |  | ? |
|              | 420,000                |  |   |  |  |         |  |   |
| Bal. 12/31   | 60,000                 |  |   |  |  |         |  |   |
|              |                        |  |   |  |  |         |  |   |
|              |                        |  |   |  |  |         |  |   |

| Work in Process | Factory Wages Payable |  |         |  |  |         |  |         |
|-----------------|-----------------------|--|---------|--|--|---------|--|---------|
| Bal. 1/1        | 70,000                |  | 810,000 |  |  | 179,000 |  | 110,000 |
| Direct material | 320,000               |  |         |  |  |         |  | 175,000 |
| Direct labor    | 110,000               |  |         |  |  |         |  |         |
| Overhead        | 400,000               |  |         |  |  |         |  | 6,000   |
|                 |                       |  |         |  |  |         |  |         |

|            |   |  |  |  |  |  |  |  |
|------------|---|--|--|--|--|--|--|--|
| Bal. 12/31 | ? |  |  |  |  |  |  |  |
|            |   |  |  |  |  |  |  |  |

|                       |           |   |  |  |   |  |  |  |
|-----------------------|-----------|---|--|--|---|--|--|--|
| <b>Finished Goods</b> | <b>C</b>  |   |  |  |   |  |  |  |
|                       | <b>os</b> |   |  |  |   |  |  |  |
|                       | <b>t</b>  |   |  |  |   |  |  |  |
|                       | <b>of</b> |   |  |  |   |  |  |  |
|                       | <b>G</b>  |   |  |  |   |  |  |  |
|                       | <b>oo</b> |   |  |  |   |  |  |  |
|                       | <b>ds</b> |   |  |  |   |  |  |  |
|                       | <b>S</b>  |   |  |  |   |  |  |  |
|                       | <b>ol</b> |   |  |  |   |  |  |  |
|                       | <b>d</b>  |   |  |  |   |  |  |  |
| Bal. 1/1              | 40,000    | ? |  |  | ? |  |  |  |
|                       | ?         |   |  |  |   |  |  |  |
|                       |           |   |  |  |   |  |  |  |
| Bal. 12/31            | 130,000   |   |  |  |   |  |  |  |
|                       |           |   |  |  |   |  |  |  |

**Required:**

- What was the cost of raw material put into production during the year?
- How much of the material from question 1 consisted of indirect material?
- How much of the factory labor cost for the year consisted of indirect labor?
- What was the cost of goods manufactured for the year?
- What was the cost of goods sold for the year (before considering under- or overapplied overhead)?
- If overhead is applied to production on the basis of direct material, what rate was in effect during the year?
- Was manufacturing overhead under- or overapplied? By how much?
- Compute the ending balance in the Work in Process Inventory account. Assume that this balance consists entirely of goods started during the year. If \$32,000 of this balance is direct material cost, how much of it is direct labor cost? Manufacturing overhead cost?

## Chapter 2--Cost Terminology and Cost Behaviors **Key**

1. A cost object is anything for which management wants to collect or accumulate costs.

**TRUE**

2. A production plant could be a cost object.

**TRUE**

3. A specific product **cannot** be a cost object

**FALSE**

4. The portion of an asset's value on the balance sheet is referred to as an expired cost.

**FALSE**

5. The portion of an asset that was consumed during a period is referred to as an expired cost.

**TRUE**

6. A variable cost remains constant on a per-unit basis as production increases

**TRUE**

7. A fixed cost remains constant on a per-unit basis as production changes.

**FALSE**

8. The relevant range is valid for all levels of activity

**FALSE**

9. An indirect cost can be easily traced to a cost object.

**FALSE**

10. Both accountants and economists view variable costs as linear in nature.

**FALSE**

11. Fixed cost per unit varies directly with production.

**FALSE**

12. Variable cost per unit remains constant within the relevant range.

**TRUE**

13. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a mixed cost.

**FALSE**

14. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a step cost.

**TRUE**

15. If the cost of an additive is  $\$5,000 + \$0.50$  for every unit of solvent produced, the cost is classified as a mixed cost.

**TRUE**

16. If the cost of an additive is  $\$5,000 + \$0.50$  for every unit of solvent produced, the cost is classified as a step cost.

**FALSE**

17. A predictor which has an absolute cause and effect relationship to a cost is referred to a cost driver.

**TRUE**

18. A mixed cost will be an effective cost driver.

**FALSE**

19. A variable cost will be an effective cost driver.

**TRUE**

20. Unexpired costs are reflected on the balance sheet.

**TRUE**

21. Expired costs are reflected on the balance sheet.

**FALSE**

22. Distribution costs are an example of product costs.

**FALSE**

23. Distribution costs are an example of period costs.

**TRUE**

24. Retailers generally have a much higher degree of conversion than do manufacturing or professional firms.

**FALSE**

25. Retailers generally have a much lower degree of conversion than do manufacturing or professional firms.

**TRUE**

26. In a service industry, direct materials are usually insignificant in amount and **cannot** easily be traced to a cost object.

**TRUE**

27. In a service industry, direct materials are usually significant in amount and can be easily traced to a cost object.

**FALSE**

28. There is an inverse relationship between prevention costs and failure costs.

**TRUE**

29. There is a direct relationship between prevention costs and failure costs.

**FALSE**

30. In an actual cost system, actual production overhead costs are accumulated in an Overhead Control account and assigned to Work in Process at the end of the period.

**TRUE**

31. In a normal cost system, actual production overhead costs are accumulated in an Overhead Control account and assigned to Work in Process at the end of the period.

**FALSE**

32. In a normal cost system, factory overhead is applied to Work in Process using a predetermined overhead rate.

**TRUE**

33. In an actual cost system, factory overhead is applied to Work in Process using a predetermined overhead rate.

**FALSE**

34. In an actual cost system, overhead is assigned to Work in Process Inventory with a debit entry to the account.

**TRUE**

35. In an actual cost system, overhead is assigned to Work in Process Inventory with a credit entry to the account.

**FALSE**

36. It is not necessary to prepare the Cost of Goods Manufactured statement prior to preparing the Cost of Goods Sold statement.

**FALSE**

37. Anything for which management wants to accumulate or collect costs is known as a \_\_\_\_\_.

**cost object**

38. Costs that can be conveniently traced to a cost object are referred to as \_\_\_\_\_ costs.

**direct**

39. Costs that **cannot** be conveniently traced to a cost object are known as \_\_\_\_\_ costs.

**indirect**

40. A cost that remains unchanged in total within the relevant range is known as a \_\_\_\_\_ cost.

**fixed**

41. A cost that varies in total in direct proportion to changes in activity is known as a \_\_\_\_\_ cost.

**variable**

42. The assumed range of activity that reflects the company's normal operating range is referred to as the \_\_\_\_\_.

**relevant range**

43. A cost that remains constant on a per unit basis within the relevant range is a \_\_\_\_\_ cost.

**variable**

44. A cost that varies inversely with the level of production is known as a \_\_\_\_\_ cost.

**fixed**

45. A cost that has both fixed and variable components is known as a \_\_\_\_\_ cost.

**mixed**

46. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a \_\_\_\_\_ cost.

**step**

47. Another name for inventoriable costs is \_\_\_\_\_ costs.

**product**

48. The three stages of production for a manufacturing firm are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

**raw materials, work in process, finished goods**

49. Costs that are incurred to improve quality by precluding defects and improper processing are referred to as \_\_\_\_\_ costs.

**prevention**

50. Costs incurred for monitoring or inspecting products are known as \_\_\_\_\_ costs.

**appraisal**

51. Costs that result from defective units, product returns, and complaints are referred to as \_\_\_\_\_ costs.

**failure**

52. The term "relevant range" as used in cost accounting means the range over which

A. costs may fluctuate.

**B.** cost relationships are valid.

C. production may vary.

D. relevant costs are incurred.

53. Which of the following defines variable cost behavior?

Total cost reaction  
to increase in activity

Cost per unit reaction  
to increase in activity

- |                            |                  |
|----------------------------|------------------|
| A. remains constant        | remains constant |
| B. remains constant        | increases        |
| C. increases               | increases        |
| <b><u>D.</u></b> increases | remains constant |

54. When cost relationships are linear, total variable prime costs will vary in proportion to changes in

- A. direct labor hours.
- B. total material cost.
- C. total overhead cost.
- D.** production volume.

55. Which of the following would generally be considered a fixed factory overhead cost?

|                                      |                             |                                            |
|--------------------------------------|-----------------------------|--------------------------------------------|
| Straight-line<br><u>depreciation</u> | Factory<br><u>insurance</u> | Units-of-production<br><u>depreciation</u> |
|--------------------------------------|-----------------------------|--------------------------------------------|

- |                  |     |     |     |
|------------------|-----|-----|-----|
| A.               | no  | no  | no  |
| B.               | yes | no  | yes |
| <b><u>C.</u></b> | yes | yes | no  |
| D.               | no  | yes | no  |

56. An example of a fixed cost is

- A. total indirect material cost.
- B. total hourly wages.
- C. cost of electricity.
- D.** straight-line depreciation.

57. A cost that remains constant in total but varies on a per-unit basis with changes in activity is called a(n)

- A. expired cost.
- B.** fixed cost.
- C. variable cost.
- D. mixed cost.

58. A(n) \_\_\_\_\_ cost increases or decreases in intervals as activity changes.

- A. historical cost
- B. fixed cost
- C.** step cost
- D. budgeted cost

59. When the number of units manufactured increases, the most significant change in unit cost will be reflected as a(n)

- A. increase in the fixed element.
- B. decrease in the variable element.
- C. increase in the mixed element.
- D. decrease in the fixed element.**

60. Which of the following always has a direct cause-effect relationship to a cost?

Predictor

Cost driver

- |              |     |
|--------------|-----|
| A. yes       | yes |
| B. yes       | no  |
| <b>C. no</b> | yes |
| D. no        | no  |

61. A cost driver

- A. causes fixed costs to rise because of production changes.
- B. has a direct cause-effect relationship to a cost.**
- C. can predict the cost behavior of a variable, but not a fixed, cost.
- D. is an overhead cost that causes distribution costs to change in distinct increments with changes in production volume.

62. Product costs are deducted from revenue

- A. as expenditures are made.
- B. when production is completed.
- C. as goods are sold.**
- D. to minimize taxable income.

63. A selling cost is a(n)

product cost

period cost

inventoriable cost

- |              |     |     |
|--------------|-----|-----|
| A. yes       | yes | no  |
| B. yes       | no  | no  |
| <b>C. no</b> | yes | no  |
| D. no        | yes | yes |

64. Which of the following is **not** a product cost component?

- A. rent on a factory building
- B. indirect production labor wages
- C. janitorial supplies used in a factory
- D.** commission on the sale of a product

65. Period costs

- A.** are generally expensed in the same period in which they are incurred.
- B. are always variable costs.
- C. remain unchanged over a given period of time.
- D. are associated with the periodic inventory method.

66. Period costs include

distribution costs

outside processing costs

sales commissions

- |               |     |     |
|---------------|-----|-----|
| <b>A.</b> yes | no  | yes |
| B. no         | yes | yes |
| C. no         | no  | no  |
| D. yes        | yes | yes |

67. The three primary inventory accounts in a manufacturing company are

- A. Merchandise Inventory, Supplies Inventory, and Finished Goods Inventory.
- B. Merchandise Inventory, Work in Process Inventory, and Finished Goods Inventory.
- C. Supplies Inventory, Work in Process Inventory, and Finished Goods Inventory.
- D.** Raw Material Inventory, Work in Process Inventory, and Finished Goods Inventory.

68. Cost of Goods Sold is an

- A. unexpired product cost.
- B.** expired product cost.
- C. unexpired period cost.
- D. expired period cost.

69. The indirect costs of converting raw material into finished goods are called

- A. period costs.
- B. prime costs.
- C.** overhead costs.
- D. conversion costs.

70. Which of the following would need to be allocated to a cost object?

- A. direct material
- B. direct labor
- C. direct production costs
- D.** indirect production costs

71. Conversion cost does **not** include

- A. direct labor.
- B.** direct material.
- C. factory depreciation.
- D. supervisors' salaries.

72. The distinction between direct and indirect costs depends on whether a cost

- A. is controllable or non-controllable.
- B. is variable or fixed.
- C.** can be conveniently and physically traced to a cost object under consideration.
- D. will increase with changes in levels of activity.

73. Langley Company is a construction company that builds houses on special request. What is the proper classification of the carpenters' wages?

| <u>Product</u> | <u>Period</u> | <u>Direct</u> |
|----------------|---------------|---------------|
|----------------|---------------|---------------|

- |                      |     |     |
|----------------------|-----|-----|
| A. yes               | yes | no  |
| <b><u>B.</u></b> yes | no  | yes |
| C. no                | no  | no  |
| D. no                | yes | yes |

74. Langley Company is a construction company that builds houses on special request. What is the proper classification of the cost of the cement building slab used?

| <u>Direct</u> | <u>Fixed</u> |
|---------------|--------------|
|---------------|--------------|

- |                      |     |
|----------------------|-----|
| A. no                | no  |
| B. no                | yes |
| C. yes               | yes |
| <b><u>D.</u></b> yes | no  |

75. Langley Company is a construction company that builds houses on special request. What is the proper classification of indirect material used?

| <u>Prime</u> | <u>Conversion</u> | <u>Variable</u> |
|--------------|-------------------|-----------------|
|--------------|-------------------|-----------------|

- |              |     |     |
|--------------|-----|-----|
| A. no        | no  | no  |
| <b>B. no</b> | yes | yes |
| C. yes       | yes | yes |
| D. yes       | no  | no  |

76. Which of the following costs would be considered overhead in the production of chocolate chip cookies?

- A. flour
- B. chocolate chips
- C. sugar
- D. oven electricity**

77. All costs related to the manufacturing function in a company are

- A. prime costs.
- B. direct costs.
- C. product costs.**
- D. conversion costs.

78. Prime cost consists of

| <u>direct material</u> | <u>direct labor</u> | <u>overhead</u> |
|------------------------|---------------------|-----------------|
|------------------------|---------------------|-----------------|

- |               |     |     |
|---------------|-----|-----|
| A. no         | yes | no  |
| <b>B. yes</b> | yes | no  |
| C. yes        | no  | yes |
| D. no         | yes | yes |

79. Plastic used to manufacture dolls is a

| <u>prime cost</u> | <u>product cost</u> | <u>direct cost</u> | <u>fixed cost</u> |
|-------------------|---------------------|--------------------|-------------------|
|-------------------|---------------------|--------------------|-------------------|

- |               |     |     |     |
|---------------|-----|-----|-----|
| A. no         | yes | yes | yes |
| B. yes        | no  | yes | no  |
| C. yes        | yes | no  | yes |
| <b>D. yes</b> | yes | yes | no  |

80. The term "prime cost" refers to

- A. all manufacturing costs incurred to produce units of output.
- B. all manufacturing costs other than direct labor and raw material costs.
- C. raw material purchased and direct labor costs.
- D.** the raw material used and direct labor costs.

81. Conversion of inputs to outputs is recorded in the

- A.** Work in Process Inventory account.
- B. Finished Goods Inventory account.
- C. Raw Material Inventory account.
- D. both a and b.

82. In a perpetual inventory system, the sale of items for cash consists of two entries. One entry is a debit to Cash and a credit to Sales. The other entry is a debit to

- A. Work in Process Inventory and a credit to Finished Goods Inventory.
- B. Finished Goods Inventory and a credit to Cost of Goods Sold.
- C.** Cost of Goods Sold and a credit to Finished Goods Inventory.
- D. Finished Goods Inventory and a credit to Work in Process Inventory.

83. The formula to compute cost of goods manufactured is

- A. beginning Work in Process Inventory plus purchases of raw material minus ending Work in Process Inventory.
- B.** beginning Work in Process Inventory plus direct labor plus direct material used plus overhead incurred minus ending Work in Process Inventory.
- C. direct material used plus direct labor plus overhead incurred.
- D. direct material used plus direct labor plus overhead incurred plus beginning Work in Process Inventory.

84. The final figure in the Schedule of Cost of Goods Manufactured represents the

- A. cost of goods sold for the period.
- B. total cost of manufacturing for the period.
- C. total cost of goods started and completed this period.
- D.** total cost of goods completed for the period.

85. The formula for cost of goods sold for a manufacturer is

- A. beginning Finished Goods Inventory plus Cost of Goods Manufactured minus ending Finished Goods Inventory.
- B. beginning Work in Process Inventory plus Cost of Goods Manufactured minus ending Work in Process Inventory.
- C. direct material plus direct labor plus applied overhead.
- D. direct material plus direct labor plus overhead incurred plus beginning Work in Process Inventory.

86. Which of the following replaces the retailing component "Purchases" in computing Cost of Goods Sold for a manufacturing company?

- A. direct material used
- B. cost of goods manufactured
- C. total prime cost
- D. cost of goods available for sale

87. Costs that are incurred to preclude defects and improper processing are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

88. Costs that are incurred for monitoring and inspecting are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

89. Costs that are incurred when customers complain are:

- A. prevention costs
- B. detection costs
- C. appraisal costs
- D. failure costs

## 90. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. The cost of raw material purchased during the year was

- A. \$316.
- B. \$336.**
- C. \$360.
- D. \$411.

## 91. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Direct labor cost charged to production during the year was

- A. \$135.
- B. \$216.
- C. \$225.**
- D. \$360.

## 92. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Cost of Goods Manufactured was

- A. \$636.
- B. \$716.
- C. \$736.**
- D. \$766.

## 93. Mitchell Company

The following information has been taken from the cost records of Mitchell Company for the past year:

|                                                                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Raw material used in production                                                                                                                          | \$326 |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to 60% of direct labor cost) | 686   |
| Cost of goods available for sale                                                                                                                         | 826   |
| Selling and Administrative expenses                                                                                                                      | 25    |

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$75             | \$ 85         |
| Work in Process    | 80               | 30            |
| Finished Goods     | 90               | 110           |

Refer to Mitchell Company. Cost of Goods Sold was

- A. \$691.
- B. \$716.**
- C. \$736.
- D. \$801.

**94. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is \$9.60 per hour and overhead for the month was \$9,600. Compute total manufacturing costs for June, if there were 1,500 direct labor hours and \$21,000 of raw material was purchased.

- A. \$58,500
- B. \$46,500
- C. \$43,500**
- D. \$43,100

**95. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. What are prime costs and conversion costs, respectively if there were 1,500 direct labor hours and \$21,000 of raw material was purchased?

- A. \$29,100 and \$33,900
- B. \$33,900 and \$24,000**
- C. \$33,900 and \$29,100
- D. \$24,000 and \$33,900

**96. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. If there were 1,500 direct labor hours and \$21,000 of raw material purchased, Cost of Goods Manufactured is:

- A. \$49,100.
- B. \$45,000.
- C. \$51,000.
- D. \$49,500.

**97. Davis Company.**

Davis Company manufactures wood file cabinets. The following information is available for June 2008:

|                           | <u>Beginning</u> | <u>Ending</u> |
|---------------------------|------------------|---------------|
| Raw Material Inventory    | \$ 6,000         | \$ 7,500      |
| Work in Process Inventory | 17,300           | 11,700        |
| Finished Goods Inventory  | 21,000           | 16,300        |

Refer to Davis Company. Direct labor is paid \$9.60 per hour and overhead for the month was \$9,600. If there were 1,500 direct labor hours and \$21,000 of raw material purchased, how much is Cost of Goods Sold?

- A. \$64,500.
- B. \$59,800.
- C. \$38,800.
- D. \$53,800.

98. Steelman Company manufactures desks. The beginning balance of Raw Material Inventory was \$4,500; raw material purchases of \$29,600 were made during the month. At month end, \$7,700 of raw material was on hand. Raw material used during the month was

- A. \$26,400.
- B. \$34,100.
- C. \$37,300.
- D. \$29,600.

99. Legend Company manufactures tables. If raw material used was \$80,000 and Raw Material Inventory at the beginning and end of the period, respectively, was \$17,000 and \$21,000, what was amount of raw material was purchased?

- A. \$76,000
- B. \$118,000
- C. \$84,000
- D. \$101,000

100. Morris Company manufactures computer stands. What is the beginning balance of Finished Goods Inventory if Cost of Goods Sold is \$107,000; the ending balance of Finished Goods Inventory is \$20,000; and Cost of Goods Manufactured is \$50,000 less than Cost of Goods Sold?

- A. \$70,000
- B. \$77,000
- C. \$157,000
- D. \$127,000

### 101. Long Enterprises

| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
|-------------------------------------|----------------|-----------------|
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, prime cost incurred was

- A. \$75,000.
- B. \$69,000.
- C. \$45,000.
- D. \$39,000.

### 102. Long Enterprises

| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
|-------------------------------------|----------------|-----------------|
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, conversion cost incurred was

- A. \$30,000.
- B. \$40,000.
- C. \$70,000.
- D. \$72,000.

### 103. Long Enterprises

|                                     |                |                 |
|-------------------------------------|----------------|-----------------|
| <u>Inventories:</u>                 | <u>March 1</u> | <u>March 31</u> |
| Raw material                        | \$18,000       | \$15,000        |
| Work in process                     | 9,000          | 6,000           |
| Finished goods                      | 27,000         | 36,000          |
| Additional information for March:   |                |                 |
| Raw material purchased              | \$42,000       |                 |
| Direct labor payroll                | 30,000         |                 |
| Direct labor rate per hour          | 7.50           |                 |
| Overhead rate per direct labor hour | 10.00          |                 |

Refer to Long Enterprises. For March, Cost of Goods Manufactured was

- A. \$118,000.
- B. \$115,000.
- C. \$112,000.
- D. \$109,000.

### 104. Define relevant range and explain its significance.

The relevant range is that range of activity over which a variable cost remains constant on a per-unit basis and a fixed cost remains constant in total. Managers can review the various ranges of activity and the related effects on variable cost (per-unit) and fixed cost (in total) to determine how a change in the range will affect costs and, thus, the firm's profitability.

### 105. Define a variable cost and a fixed cost. What causes changes in these costs? Give two examples of each.

A variable cost is one that remains constant on a per-unit basis but varies in total with changes in activity. Examples of variable costs include direct material, direct labor, and (possibly) utilities. A fixed cost is one that remains constant in total but varies on a per-unit basis with changes in activity. Examples of fixed costs include straight-line depreciation, insurance, and the supervisor's salary.

### 106. What is the difference between a product cost and a period cost? Give three examples of each. What is the difference between a direct cost and indirect cost? Give two examples of each.

A product cost is one that is associated with making or acquiring inventory. A period cost is any cost other than those associated with making or acquiring products and is not considered inventoriable. Students will have a variety of examples, but direct material, direct labor, and overhead are product costs. Selling and administrative expenses are considered period costs. A direct cost is one that is physically and conveniently traceable to a cost object. Direct material and direct labor are direct costs. An indirect cost is one that cannot be conveniently traced to a cost object. Any type of overhead cost is considered indirect.

107. What are three reasons that overhead must be allocated to products?

Overhead must be allocated because it is necessary to (1) determine full cost, (2) it can motivate managers, and (3) it allows managers to compare alternative courses of action.

108. Why should predetermined overhead rates be used?

Predetermined overhead rates should be used for three reasons: (1) to assign overhead to Work in Process during the production cycle instead of at the end of the period; (2) to compensate for fluctuations in actual overhead costs that have no bearing on activity levels; and (3) to overcome problems of fluctuations in activity levels that have no impact on actual fixed overhead costs.

109. List and explain three types of quality costs.

Prevention costs--incurred to improve quality by precluding product defects and improper processing from occurring.

Appraisal costs--incurred to find mistakes not eliminated through prevention.

Failure costs--can be internal (scrap and rework) or external (costs of returns, warranty costs).

110. Given the following information for Graves Corporation, prepare the necessary journal entries, assuming that the Raw Material Inventory account contains both direct and indirect material.

- a. Purchased raw material on account \$28,500.
- b. Put material into production: \$15,000 of direct material and \$3,000 of indirect material.
- c. Accrued payroll of \$90,000, of which 70 percent was direct and the remainder was indirect.
- d. Incurred and paid other overhead items of \$36,000.
- e. Transferred items costing \$86,500 to finished goods.
- f. Sold goods costing \$71,300 on account for \$124,700.

|    |                        |         |         |
|----|------------------------|---------|---------|
| a. | RM Inventory           | 28,500  |         |
|    | A/P                    |         | 28,500  |
| b. | WIP Inventory          | 15,000  |         |
|    | Manufacturing OH       | 3,000   |         |
|    | RM Inventory           |         | 18,000  |
| c. | WIP Inventory          | 63,000  |         |
|    | Manufacturing OH       | 27,000  |         |
|    | Salaries/Wages Payable |         | 90,000  |
| d. | Manufacturing OH       | 36,000  |         |
|    | Cash                   |         | 36,000  |
| e. | FG Inventory           | 86,500  |         |
|    | WIP Inventory          |         | 86,500  |
| f. | A/R                    | 124,700 |         |
|    | Sales                  |         | 124,700 |
|    | CGS                    | 71,300  |         |
|    | FG Inventory           |         | 71,300  |

111. Prepare a Schedule of Cost of Goods Manufactured (in good form) for the Chandler Company from the following information for June 20X8:

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$ 6,700         | \$ 8,900      |
| Work in Process    | 17,700           | 22,650        |
| Finished Goods     | 29,730           | 19,990        |

Additional information: purchases of raw material were \$46,700; 19,700 direct labor hours were worked at \$11.30 per hour; overhead costs were \$33,300.

**Chandler Company**  
**Schedule of Cost of Goods Manufactured**  
**For the Month Ended June 30, 20X8**

|                                 |                |               |                  |
|---------------------------------|----------------|---------------|------------------|
| Work in Process (June 1)        |                |               | \$ 17,700        |
| Raw Mat. (June 1)               | \$ 6,700       |               |                  |
| Purchases                       | <u>46,700</u>  |               |                  |
| Raw Mat. Available              | 53,400         |               |                  |
| Raw Mat. (June 30)              | <u>(8,900)</u> |               |                  |
| Raw Mat. Used                   |                | \$ 44,500     |                  |
| Direct Labor (19,700 ' \$11.30) |                | 222,610       |                  |
| Manufacturing Overhead          |                | <u>33,300</u> |                  |
| Total Manufacturing Costs       |                |               | <u>300,410</u>   |
| Total Goods in Process          |                |               | \$318,110        |
| Work in Process (June 30)       |                |               | <u>(22,650)</u>  |
| Cost of Goods Manufactured      |                |               | <u>\$295,460</u> |

112. In June 20X8, the Evans Company has Cost of Goods Manufactured of \$296,000; beginning Finished Goods Inventory of \$29,730; and ending Finished Goods Inventory of \$19,990. Prepare an income statement in good form. (Ignore taxes.) The following additional information is available:

|                                                                                          |                  |
|------------------------------------------------------------------------------------------|------------------|
| Selling Expenses                                                                         | \$ 40,500        |
| Administrative Expenses                                                                  | 19,700           |
| Sales                                                                                    | 475,600          |
|                                                                                          |                  |
| Evans<br>Company<br>Income<br>Statement<br>For the<br>Month<br>Ended<br>June 30,<br>20X8 |                  |
| Sales                                                                                    | \$475,600        |
| Cost of<br>Goods Sold:                                                                   |                  |
| Finished Goods (June 1)                                                                  | \$ 29,730        |
| Cost of Goods Mfd                                                                        | <u>296,000</u>   |
| Total Goods Available                                                                    | \$325,730        |
| Finished Goods (June 30)                                                                 | <u>(19,990)</u>  |
| Cost of Goods Sold                                                                       | (305,740)        |
| Gross Margin                                                                             | \$169,860        |
| Operating Expenses:                                                                      |                  |
| Selling                                                                                  | \$40,500         |
| Administrative                                                                           | 19,700           |
| Total Operating Expenses                                                                 | <u>(60,200)</u>  |
| Income from operations                                                                   | <u>\$109,660</u> |

113. The following information is for the Cameron Manufacturing Company for November.

|                    |                  |               |
|--------------------|------------------|---------------|
| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
| Raw Material       | \$17,400         | \$13,200      |
| Work in Process    | 31,150           | 28,975        |
| Finished Goods     | 19,200           | 25,500        |

|                                  |           |                            |       |
|----------------------------------|-----------|----------------------------|-------|
| Direct Labor (21,000 DLH @ \$13) |           |                            |       |
| Raw Material Purchases           | \$120,000 | Insurance-Office           | 2,570 |
| Indirect Labor                   | 11,200    | Office Supplies Expense    | 900   |
| Factory Supplies Used            | 350       | Insurance-Factory          | 1,770 |
| Other Expenses:                  |           | Depr. Office Equipment     | 3,500 |
| Depr.-Factory Equipment          | 17,300    | Repair/Maintenance-Factory | 7,400 |

Calculate total manufacturing costs, cost of goods manufactured, and cost of goods sold.

|                              |                  |                  |  |
|------------------------------|------------------|------------------|--|
| Manufacturing Costs:         |                  |                  |  |
| Raw Material (Nov. 1)        | \$ 17,400        |                  |  |
| Purchases                    | <u>120,000</u>   |                  |  |
| Raw Material Available       | \$137,400        |                  |  |
| Raw Material (Nov. 30)       | <u>(13,200)</u>  |                  |  |
| Raw Material Used            |                  | \$124,200        |  |
| Direct Labor (21,000 ' \$13) |                  | 273,000          |  |
| Overhead:                    |                  |                  |  |
| Depr.-Factory Equipment      | \$17,300         |                  |  |
| Repairs/Maintenance-Factory  | 7,400            |                  |  |
| Indirect Labor               | 11,200           |                  |  |
| Insurance-Factory            | 1,770            |                  |  |
| Factory Supplies Used        | <u>350</u>       |                  |  |
| Total Overhead               |                  | <u>38,020</u>    |  |
| Total Manufacturing Costs    |                  | <u>\$435,220</u> |  |
| Cost of Goods Manufactured:  |                  |                  |  |
| Total Manufacturing Costs    | \$435,220        |                  |  |
| Work in Process (Nov. 1)     | 31,150           |                  |  |
| Work in Process (Nov. 30)    | <u>(28,975)</u>  |                  |  |
| Cost of Goods Manufactured   | <u>\$437,395</u> |                  |  |
| Cost of Goods Sold:          |                  |                  |  |
| Finished Goods (Nov. 1)      | \$ 19,200        |                  |  |
| Cost of Goods Manufactured   | <u>437,395</u>   |                  |  |
| Total Goods Available        | \$456,595        |                  |  |
| Finished Goods (Nov. 30)     | <u>(25,500)</u>  |                  |  |
| Cost of Goods Sold           | <u>\$431,095</u> |                  |  |

114. From the following information for the Seabrook Company, compute prime costs and conversion costs.

| <u>Inventories</u> | <u>Beginning</u> | <u>Ending</u> |
|--------------------|------------------|---------------|
| Raw Material       | \$ 9,900         | \$ 7,600      |
| Work in Process    | 44,500           | 37,800        |
| Finished Goods     | 36,580           | 61,300        |

Raw material purchased during the period cost \$40,800; overhead incurred and paid or accrued for the period was \$21,750; and 23,600 direct labor hours were incurred at a rate of \$13.75 per hour.

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| Prime Costs:             |                    |                  |
| Raw Material (Beginning) | \$ 9,900           |                  |
| Purchases                | <u>40,800</u>      |                  |
| Raw Material Available   | \$50,700           |                  |
| Raw Material (Ending)    | <u>(7,600)</u>     |                  |
| Raw Material Used        |                    | \$ 43,100        |
| Direct Labor             | (23,600 × \$13.75) | <u>324,500</u>   |
| Prime Costs              |                    | <u>\$367,600</u> |
| Conversion Costs:        |                    |                  |
| Direct Labor (Above)     |                    | \$324,500        |
| Overhead                 |                    | <u>21,750</u>    |
| Conversion Costs         |                    | <u>\$346,250</u> |

115. The following miscellaneous data has been collected for a manufacturing company for the most recent year-end:

|                                 |                  |               |
|---------------------------------|------------------|---------------|
| Inventories:                    | <u>Beginning</u> | <u>Ending</u> |
| Raw material                    | \$50,000         | \$55,000      |
| Work in process                 | 40,000           | 45,000        |
| Finished goods                  | 60,000           | 50,000        |
| Costs recorded during the year: |                  |               |
| Purchases of raw material       | \$195,000        |               |
| Direct labor                    | 150,000          |               |
| Cost of goods sold              | 595,000          |               |

**Required:** Prepare a cost of goods manufactured statement showing how *all* unknown amounts were determined.

|            |                  |             |
|------------|------------------|-------------|
| BEGIN WIP  | \$ 40,000        |             |
| + DM (1)   | 190,000          |             |
| + DL       | 150,000          |             |
| + OH       | ?                | = \$250,000 |
| - END WIP  | <u>(45,000)</u>  |             |
| = COGM (2) | <u>\$585,000</u> |             |

|     |            |                  |  |
|-----|------------|------------------|--|
| (1) | BEG RM     | \$ 50,000        |  |
|     | + PURCHASE | 195,000          |  |
|     | - END RM   | <u>(55,000)</u>  |  |
|     | = DM       | <u>\$190,000</u> |  |

|     |          |                  |             |
|-----|----------|------------------|-------------|
| (2) | BEGIN FG | \$ 60,000        |             |
|     | + COGM   | ?                | = \$585,000 |
|     | - END FG | <u>(50,000)</u>  |             |
|     | = COGS   | <u>\$595,000</u> |             |

116. The following information was taken from the records of the Beaumont Corporation for the month of July. (There were no inventories of work in process or finished goods on July 1.)

|                                | Units | Cost         |
|--------------------------------|-------|--------------|
| Sales during month             | 8,000 | \$ ?         |
| Manufacturing costs for month: |       |              |
| Direct material                |       | 32,000       |
| Direct labor                   |       | 20,000       |
| Overhead costs applied         |       | 15,000       |
| Overhead costs under-applied   |       | 800          |
| Inventories, July 31:          |       |              |
| Work in process                |       | 1,000      ? |
| Finished goods                 |       | 2,000      ? |

Indirect manufacturing costs are applied on a direct labor cost basis. The under-applied balance is due to seasonal variations and will be carried forward. The following cost estimates have been submitted for the work in process inventory of July 31: material, \$3,000; direct labor, \$2,000.

**Required:**

- Determine the number of units that were completed and transferred to finished goods during the month.
- Complete the estimate of the cost of work in process on July 31.
- Compute cost of goods manufactured for the month.
- Determine the cost of each unit completed during the month.
- Determine the total amount debited to the Overhead Control accounts during the month.

a. 8,000 SOLD + 2,000 ENDING FG  
= 10,000 UNITS

b. DM \$3,000  
DC 2,000  
OH - = \$15,000 + \$2,000  
1,500,000/\$  
0 20,000  
0  
\$6,500

c. DM \$32,000  
DL 20,000  
OH 15,000  
- END WIP (6,500)  
= COGM \$60,500

d. COGM/COMPLETE UNITS =  $\frac{\$60,500}{10,000 \text{ UNI}} = \$6.05/\text{UNIT}$

e. OH APPLIED \$15,000  
+ OH UNDERAPPLIED 800  
ACTUAL OH \$15,800

117. The Sherwood Groves Corporation had the following account balances:

|            | Raw Material | Manufacturing Overhead |   |  |  |         |   |  |
|------------|--------------|------------------------|---|--|--|---------|---|--|
| Bal. 1/1   | 30,000       |                        | ? |  |  | 385,000 | ? |  |
|            | 420,000      |                        |   |  |  |         |   |  |
| Bal. 12/31 | 60,000       |                        |   |  |  |         |   |  |
|            |              |                        |   |  |  |         |   |  |
|            |              |                        |   |  |  |         |   |  |

| Work in Process | Factory Wages Payable |  |          |  |  |         |  |         |  |
|-----------------|-----------------------|--|----------|--|--|---------|--|---------|--|
| Bal. 1/1        | 70,000                |  | \$10,000 |  |  | 179,000 |  | 110,000 |  |
| Direct material | 320,000               |  |          |  |  |         |  | 175,000 |  |
| Direct labor    | 110,000               |  |          |  |  |         |  |         |  |
| Overhead        | 400,000               |  |          |  |  |         |  | 6,000   |  |
| Bal. 12/31      | ?                     |  |          |  |  |         |  |         |  |

| Finished Goods | Cost of Goods Sold |  |   |  |  |   |  |  |  |
|----------------|--------------------|--|---|--|--|---|--|--|--|
| Bal. 1/1       | 40,000             |  | ? |  |  | ? |  |  |  |
|                | ?                  |  |   |  |  |   |  |  |  |
| Bal. 12/31     | 130,000            |  |   |  |  |   |  |  |  |

- Required:**
- What was the cost of raw material put into production during the year?
  - How much of the material from question 1 consisted of indirect material?
  - How much of the factory labor cost for the year consisted of indirect labor?
  - What was the cost of goods manufactured for the year?
  - What was the cost of goods sold for the year (before considering under- or overapplied overhead)?
  - If overhead is applied to production on the basis of direct material, what rate was in effect during the year?
  - Was manufacturing overhead under- or overapplied? By how much?
  - Compute the ending balance in the Work in Process Inventory account. Assume that this balance consists entirely of goods started during the year. If \$32,000 of this balance is direct material cost, how much of it is direct labor cost? Manufacturing overhead cost?

a.  $\$30,000 + \$420,000 - \$60,000 =$   
 $\$390,000$

b.  $\$390,000 - \$320,000 \text{ DM} = \$70,000$

c.  $\$175,000 - \$110,000 \text{ DL} = \$65,000$

d.  $\$810,000$

e.  $\$40,000 + \$810,000 - \$130,000 =$   
 $\$720,000$

f.  $\$400,000 / \$320,000 = 125\% \text{ DM Cost}$

g.

|                |                |
|----------------|----------------|
| OH Actual      | \$385,000      |
| OH Applied     | <u>400,000</u> |
| OH Overapplied | \$ 15,000      |

h.

|               |                  |
|---------------|------------------|
| Beginning WIP | \$ 70,000        |
| + DM          | 320,000          |
| + DC          | 110,000          |
| + OH          | 400,000          |
| - Ending WIP  | <u>(90,000)</u>  |
| = COGM        | <u>\$810,000</u> |

|                 |                 |
|-----------------|-----------------|
| DM              | \$32,000        |
| DL (To Balance) | 18,000          |
| FOH (1)         | <u>40,000</u>   |
| End WIP         | <u>\$90,000</u> |

(1)  $\$32,000 \times 125\% = \$40,000$