# Chapter 2--Cost Terminology and Cost Behaviors 

## Student.

$\qquad$

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 can not 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 typically an inverse relationship between prevention costs and failure costs.

True False
29. There is typically a direct relationship between prevention costs and failure costs. True False
30. In an actual cost system, actual production overhead costs are typically accumulated in an Overhead Control account and assigned to Work in Process at the end of the period.
True False
31. In a normal cost system, actual production overhead costs are typically 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
$\qquad$ .
38. Costs that can be conveniently traced to a cost object are referred to as $\qquad$ costs.
39. Costs that cannot be conveniently traced to a cost object are known as $\qquad$ costs.
40. A cost that remains unchanged in total within the relevant range is known as a $\qquad$ cost.
41. A cost that varies in total in direct proportion to changes in activity is known as a $\qquad$ cost
42. The assumed range of activity that reflects the company's normal operating range is referred to as the
$\qquad$ .
43. A cost that remains constant on a per unit basis within the relevant range is a $\qquad$ cost.
44. A cost that varies inversely with the level of production is known as a $\qquad$ cost.
45. A cost that has both fixed and variable components is known as a $\qquad$ cost.
$\qquad$
46. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a
$\qquad$ cost.
47. Another name for inventoriable costs is $\qquad$ costs.
$\qquad$
48. The three stages of production for a manufacturing firm are $\qquad$ ,
$\qquad$ , and $\qquad$ .
49. Costs that are incurred to improve quality by precluding defects and improper processing are referred to as
$\qquad$ costs.
50. Costs incurred for monitoring or inspecting products are known as $\qquad$ costs.
51. Costs that result from defective units, product returns, and complaints are referred to as
$\qquad$ 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?
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?

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


| 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) $\qquad$ 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 $\mathrm{a}(\mathrm{n})$
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 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. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of the carpenters' wages?

Product Period Direct
A. yes yes no
B. yes no yes
C. no no no
D. no yes yes
74. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of the cost of the cement building slab used?

Direct Fixed
A. no no
B. no yes
C. yes yes
D. yes no
75. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of indirect material used?
Prime Conversion $\quad \underline{\text { Variable }}$

| 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
$\underline{\text { direct material }} \underline{\text { direct labor }} \underline{\text { overhead }}$
A.no yes no
B. yes yes no
C. yes no yes
D. no yes yes
79. Plastic used to manufacture dolls is a
prime cost
product cost
direct cost
$\underline{\text { fixed cost }}$
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. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | $\frac{\text { Ending }}{}$ |
| :--- | :--- | :--- |
| Raw Material | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. The cost of raw material purchased during the year was
A. $\$ 316$.
B. $\$ 336$.
C. $\$ 360$.
D. $\$ 411$.

## 91. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
|  | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. Direct labor cost charged to production during the year was
A. \$135.
B. $\$ 216$.
C. $\$ 225$.
D. $\$ 360$.

## 92. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


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

Refer to Jordan Company. Cost of Goods Manufactured was
A. \$636.
B. $\$ 716$.
C. $\$ 736$.
D. $\$ 766$.

## 93. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. Cost of Goods Sold was
A. \$691.
B. $\$ 716$.
C. $\$ 736$.
D. $\$ 801$.

## 94. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :--- |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Corporation. The cost of raw material purchased during the year was
A. \$326.
B. $\$ 346$
C. $\$ 375$
D. $\$ 426$

## 95. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :---: |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | $\underline{\text { Beginning }}$ | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Company. Direct labor cost charged to production during the year was
A. $\$ 125$
B. $\$ 188$
C. $\$ 250$
D. $\$ 375$.

## 96. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :--- |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Company. Cost of Goods Manufactured was
A. $\$ 651$
B. $\$ 736$
C. $\$ 771$
D. $\$ 796$

## 97. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:
Raw material used in production ..... \$336
Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to ..... 711$50 \%$ of direct labor cost)Cost of goods available for sale851
Selling and Administrative expenses ..... 35

| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

A. $\$ 711$
B. $\$ 746$
C. $\$ 796$
D. $\$ 816$

## 98. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

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

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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. $\$ 43,100$

## 99. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

|  | Beginning | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw Material Inventory | $\$ 6,000$ | $\$ 7,500$ |
| Work in Process Inventory | 17,300 | 11,700 |
| Finished Goods Inventory | 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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 $\$ 33,900$

## 100. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

Raw Material Inventory
Work in Process Inventory
Finished Goods Inventory

| Beginning | Ending |
| :--- | :--- |
| $\$ 6,000$ | $\$ 7,500$ |
| 17,300 | 11,700 |
| 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.

Refer to Perry Company. 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. $\$ 49,500$.

## 101. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

|  | Beginning | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw Material Inventory | $\$ 6,000$ | $\$ 7,500$ |
| Work in Process Inventory | 17,300 | 11,700 |
| Finished Goods Inventory | 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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. $\$ 53,800$.
102. Roberson 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. $\$ 29,600$.
103. Gallagher Company manufactures tables. The beginning balance of Raw Material Inventory was $\$ 5,500$; raw material purchases of $\$ 31,500$ were made during the month. At month end, $\$ 8,200$ of raw material was on hand. Raw material used during the month was
A. $\$ 28,800$
B. $\$ 31,500$
C. $\$ 37,000$.
D. $\$ 39,200$
104. Marley 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. $\$ 101,000$
105. Sheets Company manufactures chairs. If raw material used was $\$ 100,000$ and Raw Material Inventory at the beginning and end of the period, respectively, was $\$ 27,000$ and $\$ 31,000$, what was amount of raw material was purchased?
A. \$ 96,000
B. $\$ 104,000$
C. $\$ 158,000$
D. $\$ 131,000$
106. Terrell 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. $\$ 127,000$

## 107. Anderson Enterprises

## Inventories:

Raw material
Work in process
Finished goods
Additional information for March:
Raw material purchased
Direct labor payroll
Direct labor rate per hour
Overhead rate per direct labor hour

| March 1 | $\underline{\text { March } 31}$ |
| :--- | :--- |
| $\$ 18,000$ | $\$ 15,000$ |
| 9,000 | 6,000 |
| 27,000 | 36,000 |
| $\$ 42,000$ |  |
| $\$ 30,000$ |  |
| $\$ 7.50$ |  |
| $\$ 10.00$ |  |

Refer to Anderson Enterprises. For March, prime cost incurred was
A. $\$ 75,000$.
B. $\$ 69,000$.
C. $\$ 45,000$.
D. $\$ 39,000$.

## 108. Anderson Enterprises

| Inventories: | $\underline{\text { March } 1}$ | $\underline{\text { March } 31}$ |
| :--- | :--- | :--- |
| Raw material | $\$ 18,000$ | $\$ 15,000$ |
| Work in process | 9,000 | 6,000 |
| Finished goods | 27,000 | 36,000 |
| Additional information for March: | $\$ 42,000$ |  |
| Raw material purchased | $\$ 30,000$ |  |
| Direct labor payroll | $\$ 7.50$ |  |
| Direct labor rate per hour | $\$ 10.00$ |  |

Refer to Anderson Enterprises. For March, conversion cost incurred was
A. \$30,000.
B. $\$ 40,000$.
C. $\$ 70,000$.
D. $\$ 72,000$.

## 109. Anderson Enterprises

| Inventories: | $\underline{\text { March } 1}$ |
| :--- | :--- |
| Raw material | $\$ 18,000$ |
| Work in process | 9,000 |
| Finished goods | 27,000 |
| Additional information for March: | $\$ 42,000$ |
| Raw material purchased | $\$ 30,000$ |
| Direct labor payroll | $\$ 7.50$ |
| Direct labor rate per hour | $\$ 10.00$ |
| Overhead rate per direct labor hour |  |

March 31
Raw material \$18,000
Work in process
9,000
\$15,000
6,000
36,000

Refer to Anderson Enterprises. For March, Cost of Goods Manufactured was
A. $\$ 118,000$.
B. $\$ 115,000$.
C. $\$ 112,000$.
D. $\$ 109,000$.

## 110. Goodwin Enterprises

| Inventories: | $\underline{\text { April 1 }}$ |
| :--- | :--- |
| Raw material | $\$ 20,000$ |
| Work in process | 12,000 |
| Finished goods | 30,000 |
| Additional information for April: | $\$ 45,000$ |
| Raw material purchased | $\$ 36,000$ |
| Direct labor payroll | $\$ 8.00$ |
| Direct labor rate per hour | $\$ 10.00$ |
| Overhead rate per direct labor hour |  |

April 30
\$17,000
8,000
39,000

Refer to Goodwin Enterprises. For April, prime cost incurred was
A. $\$ 78,000$.
B. $\$ 84,000$
C. $\$ 51,000$.
D. $\$ 45,000$.

## 111. Goodwin Enterprises

| Inventories: | $\underline{\text { April } 1}$ | $\underline{\text { April } 30}$ |
| :--- | :--- | :--- |
| Raw material | $\$ 20,000$ | $\$ 17,000$ |
| Work in process | 12,000 | 8,000 |
| Finished goods | 30,000 | 39,000 |
| Additional information for April: | $\$ 45,000$ |  |
| Raw material purchased | $\$ 36,000$ |  |
| Direct labor payroll | $\$ 8.00$ |  |
| Direct labor rate per hour | $\$ 10.00$ |  |
| Overhead rate per direct labor hour |  |  |

Refer to Goodwin Enterprises. For April, conversion cost incurred was
A. $\$ 36,000$
B. $\$ 45,000$.
C. $\$ 81,000$.
D. $\$ 84,000$.

## 112. Goodwin Enterprises

| Inventories: | $\underline{\text { April } 1}$ |
| :--- | :--- |
| Raw material | $\$ 20,000$ |
| Work in process | 12,000 |
| Finished goods | 30,000 |
| Additional information for April: | $\$ 45,000$ |
| Raw material purchased | $\$ 36,000$ |
| Direct labor payroll | $\$ 8.00$ |
| Direct labor rate per hour | $\$ 10.00$ |

Refer to Goodwin Enterprises. For April, Cost of Goods Manufactured was
A. $\$ 141,000$
B. $\$ 133,000$.
C. $\$ 125,000$.
D. $\$ 121,000$.
113. Define the relevant range and explain its significance.
114. Define a variable cost and a fixed cost. What causes changes in these costs? Give two examples of each.
115. 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.
116. What are three reasons that overhead must be allocated to products?
117. Why should predetermined overhead rates be used?
118. List and explain three types of quality costs.
119. 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.
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 $\$ 124,700$.
120. Given the following information for Moore 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 $\$ 45,500$.
b. Put material into production: $\$ 28,000$ of direct material and $\$ 5,000$ of indirect material.
c. Accrued payroll of $\$ 95,000$, of which 65 percent was direct and the remainder was indirect.
d. Incurred and paid other overhead items of \$42,000.
e. Transferred items costing $\$ 92,500$ to finished goods.
f. Sold goods costing $\$ 79,900$ on account for $\$ 134,200$.
121. Using the information below, prepare a Schedule of Cost of Goods Manufactured (in good form) for the Gibbs Company for June 20y0:

| Inventories | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| 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.
122. Using the information below, prepare a Schedule of Cost of Goods Manufactured (in good form) for the Ezell Company for June 20y0:

| $\underline{\text { Inventories }}$ | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw Material | $\$ 8,500$ | $\$ 9,700$ |
| Work in Process | 20,400 | 25,800 |
| Finished Goods | 31,350 | 21,375 |

Additional information: purchases of raw material were $\$ 51,900 ; 21,560$ direct labor hours were worked at $\$ 12.50$ per hour; overhead costs were \$39,800.
123. In June 20y0, the Thompson 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 |

124. The following information is for the Lawton Manufacturing Company for November.

| Inventories | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| 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.
125. The following information is for the Guthrie Manufacturing Company for November.

| Inventories | Beginning |  | Ending |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Raw Material | \$19,750 |  | \$15,400 |  |  |
| Work in Process | 35,350 |  | 32,200 |  |  |
| Finished Goods | 21,300 |  | 27,900 |  |  |
| Direct Labor (22,000 DLH @ \$14) |  |  |  |  |  |
| Raw Material Purchases |  | \$155,000 |  | Insurance-Office | 2,750 |
| Indirect Labor |  | 11,600 |  | Office Supplies Expense | 1,050 |
| Factory Supplies Used |  | 475 |  | Insurance-Factory | 1,825 |
| Other Expenses: |  |  |  | Depr. Office Equipment | 3,900 |
| Depr.-Factory Equipment |  | 18,100 |  | Repair/Maintenance-Factory | 7,800 |

Calculate total manufacturing costs, cost of goods manufactured, and cost of goods sold.
126. From the following information for the Norman Company, compute prime costs and conversion costs.

| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| 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.
127. The following miscellaneous data has been collected for Bethany Manufacturing Company for the most recent year-end:

| Inventories: | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw material | $\$ 50,000$ | $\$ 55,000$ |
| Work in process | 40,000 | 45,000 |
| Finished goods | 60,000 | 50,000 |
| Costs recorded during the year: | $\$ 195,000$ |  |
| Purchases of raw material | 150,000 |  |
| Direct labor | 595,000 |  |

Required: Prepare statements of cost of goods manufactured and cost of goods sold showing how all unknown amounts were determined.
128. The following information was taken from the records of the Baytown Corporation for the month of July. (There were no inventories of work in process or finished goods on July 1.)

| Sales <br> during <br> month | $\frac{\text { Units }}{8,000}$ |
| :--- | :---: |
| Manuf |  |
| acturin |  |$\quad \$ ?$

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:

a. Determine the number of units that were completed and transferred to finished goods during the month.
b. Complete the estimate of the cost of work in process on July 31.
c. Compute cost of goods manufactured for the month.
d. Determine the cost of each unit completed during the month.
e. Determine the total amount debited to the Overhead Control accounts during the month.
129. The Silsbee Corporation had the following account balances:

|  | Raw Material | Manufactur <br> ing <br> Overhead |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 30,000 |  |  | ? |  |  |  |
| Bal. $1 / 1$ | 420,000 |  |  |  |  | 385,000 | $?$ |
|  | 60,000 |  |  |  |  |  |  |
| Bal. $12 / 31$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |





## Required:

a. What was the cost of raw material put into production during the year?
b. How much of the material from question 1 consisted of indirect material?
c. How much of the factory labor cost for the year consisted of indirect labor?
d. What was the cost of goods manufactured for the year?
e. What was the cost of goods sold for the year (before considering under- or overapplied overhead)?
f. If overhead is applied to production on the basis of direct material, what rate was in effect during the year?
g. Was manufacturing overhead under- or overapplied? By how much?
h. 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 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 can not 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 typically an inverse relationship between prevention costs and failure costs. TRUE
29. There is typically a direct relationship between prevention costs and failure costs. FALSE
30. In an actual cost system, actual production overhead costs are typically 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 typically 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 $\qquad$ costs. direct
39. Costs that cannot be conveniently traced to a cost object are known as $\qquad$ costs. indirect
40. A cost that remains unchanged in total within the relevant range is known as a $\qquad$ cost.
fixed
41. A cost that varies in total in direct proportion to changes in activity is known as a $\qquad$ 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 $\qquad$ cost. variable
44. A cost that varies inversely with the level of production is known as a $\qquad$ cost. fixed
45. A cost that has both fixed and variable components is known as a $\qquad$ cost. $\underline{\text { mixed }}$
46. A cost that shifts upward or downward when activity changes by a certain interval is referred to as a
$\qquad$ cost.

## step

47. Another name for inventoriable costs is $\qquad$ costs.

## product

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

## 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
$\qquad$ costs.

## prevention

50. Costs incurred for monitoring or inspecting products are known as $\qquad$ costs. appraisal
51. Costs that result from defective units, product returns, and complaints are referred to as
$\qquad$ 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?
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?

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


| 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) $\qquad$ 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 $\quad$ 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 $\mathrm{a}(\mathrm{n})$
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 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

| 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. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of the carpenters' wages?

Product Period Direct
A. yes yes no
B. yes no yes
C. no no no
D. no yes yes
74. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of the cost of the cement building slab used?

Direct Fixed
A. no no
B. no yes
C. yes yes
D. yes no
75. Moore Company is a construction company that builds greenhouses on special request. What is the proper classification of indirect material used?
Prime $\quad \underline{\text { Conversion }}$

| 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
$\underline{\text { direct material } \quad \underline{\text { direct labor }} \quad \underline{\text { overhead }}}$

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

79. Plastic used to manufacture dolls is a
prime cost
product cost
direct cost
$\underline{\text { fixed cost }}$

| 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. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | $\frac{\text { Ending }}{}$ |
| :--- | :--- | :--- |
| Raw Material | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. The cost of raw material purchased during the year was
A. $\$ 316$.
B. $\$ 336$.
C. $\$ 360$.
D. $\$ 411$.

## 91. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. Direct labor cost charged to production during the year was
A. \$135.
B. $\$ 216$.
C. $\$ 225$.
D. $\$ 360$.

## 92. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


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

Refer to Jordan Company. Cost of Goods Manufactured was
A. $\$ 636$.
B. $\$ 716$.
C. $\$ 736$.
D. $\$ 766$.

## 93. Jordan Company

The following information has been taken from the cost records of Jordan 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 | 686 |
| $60 \%$ of direct labor cost) | 826 |
| Cost of goods available for sale | 25 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 75$ | $\$ 85$ |
| Work in Process | 80 | 30 |
| Finished Goods | 90 | 110 |

Refer to Jordan Company. Cost of Goods Sold was
A. \$691.
B. $\$ 716$.
C. $\$ 736$.
D. $\$ 801$.

## 94. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :--- |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Corporation. The cost of raw material purchased during the year was
A. \$326.
B. $\$ 346$
C. $\$ 375$
D. $\$ 426$

## 95. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :---: |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | $\underline{\text { Beginning }}$ | Ending |
| :--- | :--- | :--- |
|  | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Company. Direct labor cost charged to production during the year was
A. $\$ 125$
B. $\$ 188$
C. $\$ 250$
D. $\$ 375$.

## 96. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:

| Raw material used in production | $\$ 336$ |
| :--- | :--- |
| Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to | 711 |
| $50 \%$ of direct labor cost) | 851 |
| Cost of goods available for sale | 35 |
| Selling and Administrative expenses |  |


| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Company. Cost of Goods Manufactured was
A. $\$ 651$
B. $\$ 736$
C. $\$ 771$
D. $\$ 796$

## 97. Horner Corporation

The following information has been taken from the cost records of Horner Corporation for the past year:
Raw material used in production ..... $\$ 336$
Total manufacturing costs charged to production during the year (includes direct material, direct labor, and overhead equal to ..... 711$50 \%$ of direct labor cost)Cost of goods available for sale851
Selling and Administrative expenses ..... 35

| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 80$ | $\$ 90$ |
| Work in Process | 85 | 25 |
| Finished Goods | 80 | 105 |

Refer to Horner Company. Cost of Goods Sold was
A. $\$ 711$
B. $\$ 746$
C. $\$ 796$
D. $\$ 816$

## 98. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

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

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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. $\$ 43,100$

## 99. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

|  | Beginning | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw Material Inventory | $\$ 6,000$ | $\$ 7,500$ |
| Work in Process Inventory | 17,300 | 11,700 |
| Finished Goods Inventory | 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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 $\$ 33,900$

## 100. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

Raw Material Inventory
Work in Process Inventory
Finished Goods Inventory

| Beginning | Ending |
| :--- | :--- |
| $\$ 6,000$ | $\$ 7,500$ |
| 17,300 | 11,700 |
| 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.

Refer to Perry Company. 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. $\$ 49,500$.

## 101. Perry Company.

Perry Company manufactures wood file cabinets. The following information is available for June of the current year.

|  | Beginning | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw Material Inventory | $\$ 6,000$ | $\$ 7,500$ |
| Work in Process Inventory | 17,300 | 11,700 |
| Finished Goods Inventory | 21,000 | 16,300 |

The direct labor rate is $\$ 9.60$ per hour and overhead for the month was $\$ 9,600$.
Refer to Perry Company. 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. $\$ 53,800$.
102. Roberson 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. $\$ 29,600$.
103. Gallagher Company manufactures tables. The beginning balance of Raw Material Inventory was $\$ 5,500$; raw material purchases of $\$ 31,500$ were made during the month. At month end, $\$ 8,200$ of raw material was on hand. Raw material used during the month was
A. $\$ 28,800$
B. \$31,500
C. $\$ 37,000$.
D. $\$ 39,200$
104. Marley 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. $\$ 101,000$
105. Sheets Company manufactures chairs. If raw material used was $\$ 100,000$ and Raw Material Inventory at the beginning and end of the period, respectively, was $\$ 27,000$ and $\$ 31,000$, what was amount of raw material was purchased?
A. \$ 96,000
B. $\$ 104,000$
C. $\$ 158,000$
D. $\$ 131,000$
106. Terrell 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. $\$ 127,000$

## 107. Anderson Enterprises

$\frac{\text { Inventories: }}{\text { Raw material }}$
Work in process
Finished goods
Additional information for March:
Raw material purchased
Direct labor payroll
Direct labor rate per hour
Overhead rate per direct labor hour

| March 1 | $\underline{\text { March 31 }}$ |
| :--- | :--- |
| $\$ 18,000$ | $\$ 15,000$ |
| 9,000 | 6,000 |
| 27,000 | 36,000 |
| $\$ 42,000$ |  |
| $\$ 30,000$ |  |
| $\$ 7.50$ |  |
| $\$ 10.00$ |  |

Refer to Anderson Enterprises. For March, prime cost incurred was
A. $\$ 75,000$.
B. $\$ 69,000$.
C. $\$ 45,000$.
D. $\$ 39,000$.

## 108. Anderson Enterprises

| Inventories: | $\underline{\text { March } 1}$ | $\underline{\text { March } 31}$ |
| :--- | :--- | :--- |
| Raw material | $\$ 18,000$ | $\$ 15,000$ |
| Work in process | 9,000 | 6,000 |
| Finished goods | 27,000 | 36,000 |
| Additional information for March: | $\$ 42,000$ |  |
| Raw material purchased | $\$ 30,000$ |  |
| Direct labor payroll | $\$ 7.50$ |  |
| Direct labor rate per hour | $\$ 10.00$ |  |

Refer to Anderson Enterprises. For March, conversion cost incurred was
A. \$30,000.
B. $\$ 40,000$.
C. \$70,000.
D. $\$ 72,000$.

## 109. Anderson Enterprises

| Inventories: | $\underline{\text { March } 1}$ |
| :--- | :--- |
| Raw material | $\$ 18,000$ |
| Work in process | 9,000 |
| Finished goods | 27,000 |
| Additional information for March: | $\$ 42,000$ |
| Raw material purchased | $\$ 30,000$ |
| Direct labor payroll | $\$ 7.50$ |
| Direct labor rate per hour | $\$ 10.00$ |
| Overhead rate per direct labor hour |  |

March 31
Raw material \$18,000
Work in process
9,000
\$15,000
6,000
36,000

Refer to Anderson Enterprises. For March, Cost of Goods Manufactured was
A. $\$ 118,000$.
B. $\$ 115,000$.
C. $\$ 112,000$.
D. $\$ 109,000$.

## 110. Goodwin Enterprises

| Inventories: | $\underline{\text { April 1 }}$ |
| :--- | :--- |
| Raw material | $\$ 20,000$ |
| Work in process | 12,000 |
| Finished goods | 30,000 |
| Additional information for April: | $\$ 45,000$ |
| Raw material purchased | $\$ 36,000$ |
| Direct labor payroll | $\$ 8.00$ |
| Direct labor rate per hour | $\$ 10.00$ |
| Overhead rate per direct labor hour |  |

April 30
\$17,000
8,000
39,000

Refer to Goodwin Enterprises. For April, prime cost incurred was
A. $\$ 78,000$.
B. $\$ 84,000$
C. $\$ 51,000$.
D. $\$ 45,000$.

## 111. Goodwin Enterprises

| Inventories: | $\underline{\text { April 1 }}$ |
| :--- | :--- |
| Raw material | $\$ 20,000$ |
| Work in process | 12,000 |
| Finished goods | 30,000 |
| Additional information for April: | $\$ 45,000$ |
| Raw material purchased | $\$ 36,000$ |
| Direct labor payroll | $\$ 8.00$ |
| Direct labor rate per hour | $\$ 10.00$ |
| Overhead rate per direct labor hour |  |

April 30 \$17,000 8,000 39,000

Refer to Goodwin Enterprises. For April, conversion cost incurred was
A. $\$ 36,000$
B. $\$ 45,000$.
C. $\$ 81,000$.
D. $\$ 84,000$.

## 112. Goodwin Enterprises

| Inventories: | $\underline{\text { April } 1}$ |
| :--- | :--- |
| Raw material | $\$ 20,000$ |
| Work in process | 12,000 |
| Finished goods | 30,000 |
| Additional information for April: | $\$ 45,000$ |
| Raw material purchased | $\$ 36,000$ |
| Direct labor payroll | $\$ 8.00$ |
| Direct labor rate per hour | $\$ 10.00$ |

Refer to Goodwin Enterprises. For April, Cost of Goods Manufactured was
A. $\$ 141,000$
B. $\$ 133,000$.
C. $\$ 125,000$.
D. $\$ 121,000$.

April 30
\$17,000
8,000
39,000
113. Define the 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.
114. 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 inversely on a per-unit basis with changes in activity. Examples of fixed costs include straight-line depreciation, insurance, and the supervisor's salary.
115. 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.
116. 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.
117. 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.
118. 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).
119. 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 | 3,000 |  |
|  | OH |  |  |
|  | RM Inventory |  | 18,000 |
| c. | WIP Inventory | 63,000 |  |
|  | Manufacturing | 27,000 |  |
|  | OH |  |  |
|  | Salaries/Wages |  | 90,000 |
|  | Payable |  |  |
| d. | Manufacturing | 36,000 |  |
|  | OH |  |  |
|  | 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 |

120. Given the following information for Moore Corporation, prepare the necessary journal entries, assuming that the Raw Material Inventory account contains both direct and indirect material.
[^0]| a. | RM Inventory | 45,500 | 45,500 |
| :---: | :---: | :---: | :---: |
|  | A/P |  |  |
| b. | WIP Inventory | 28,000 |  |
|  | Manufacturing | 5,000 |  |
|  | OH |  |  |
|  | RM Inventory |  | 33,000 |
| c. | WIP Inventory | 61,750 |  |
|  | Manufacturing | 33,250 | 95,000 |
|  | OH |  |  |
|  | Salaries/Wages |  |  |
|  | Payable |  |  |
| d. | Manufacturing | 42,000 |  |
|  | OH |  |  |
|  | Cash |  | 42,000 |
| e. | FG Inventory | 92,500 |  |
|  | WIP Inventory |  | 92,500 |
| f. | A/R | 134,200 |  |
|  | Sales |  | 134,200 |
|  | CGS | 79,900 |  |
|  | FG Inventory |  | 79,900 |

121. Using the information below, prepare a Schedule of Cost of Goods Manufactured (in good form) for the Gibbs Company for June 20y0:

| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| 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.

Gibbs Company
Schedule of Cost of Goods Manufactured
For the Month Ended June 30, 20y0

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

122. Using the information below, prepare a Schedule of Cost of Goods Manufactured (in good form) for the Ezell Company for June 20y0:

| Inventories | $\underline{\text { Beginning }}$ | Ending |
| :--- | :--- | :--- |
| Raw Material | $\$ 8,500$ | $\$ 9,700$ |
| Work in Process | 20,400 | 25,800 |
| Finished Goods | 31,350 | 21,375 |

Additional information: purchases of raw material were $\$ 51,900 ; 21,560$ direct labor hours were worked at $\$ 12.50$ per hour; overhead costs were \$39,800.

Ezell Company
Schedule of Cost of Goods Manufactured
For the Month Ended June 30, 20y0
Work in Process (June 1) \$ 20,400

| Raw Mat. (June 1) | \$8,500 |  |  |
| :---: | :---: | :---: | :---: |
| Purchases | 51,900 |  |  |
| Raw Mat. Available | 60,400 |  |  |
| Raw Mat. (June 30) | (9,700) |  |  |
| Raw Mat. Used |  | \$ 50,700 |  |
| Direct Labor (21,560 ${ }^{\text {² }}$ \$12.50) |  | 269,500 |  |
| Manufacturing Overhead |  | 39,800 |  |
| Total Manufacturing Costs |  |  | 360,000 |
| Total Goods in Process |  |  | \$380,400 |
| Work in Process (June 30) |  |  | $(25,800)$ |
| Cost of Goods Manufactured |  |  | \$354,600 |

123. In June 20y0, the Thompson 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
Administrative Expenses
Sales
\$ 40,500
19,700
475,600

| Thompson |  |  |
| :---: | :---: | :---: |
| Company |  |  |
| Income |  |  |
| Statement |  |  |
| For the |  |  |
| Month |  |  |
| Ended June |  |  |
| 30, 20y0 |  |  |
| Sales |  | \$475,600 |
| Cost of |  |  |
| Goods Sold: |  |  |
| Finished | \$ 29,730 |  |
| Goods (June |  |  |
| 1) |  |  |
| Cost of 296,000 |  |  |
| Goods Mf'd |  |  |
| Total Goods \$325,730 |  |  |
| Available |  |  |
| Finished | $(19,990)$ |  |
| Goods (June |  |  |
| 30) |  |  |
| Cost of |  | (305,740) |
| Goods Sold |  |  |
| Gross |  | \$169,860 |
| Margin |  |  |
| Operating |  |  |
| Expenses: |  |  |
|  | Selling | \$40,500 |
|  | Administrative | 19,700 |
| Total |  | $(60,200)$ |
| Operating |  |  |
| Expenses |  |  |
| Income from operations |  | \$109,660 |

124. The following information is for the Lawton Manufacturing Company for November.

| Inventories | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| 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 | $\underline{120,000}$ |
| Raw Material Available | $\$ 137,400$ |
| Raw Material (Nov. 30) | $\underline{(13,200)}$ |

\$124,200
Raw Material Used 273,000
Direct Labor (21,000 ${ }^{\prime} \$ 13$ )
Overhead:
Depr.-Factory Equipment
\$17,300
Repairs/Maintenance-Factory
7,400
Indirect Labor
11,200
Insurance-Factory
1,770
Factory Supplies Used
350
Total Overhead
Total Manufacturing Costs
Cost of Goods Manufactured:
Total Manufacturing Costs
\$435,220
Work in Process (Nov. 1)
Work in Process (Nov. 30)
31,150
$(28,975)$
\$437,395
Cost of Goods Sold:
Finished Goods (Nov. 1) $\quad \$ 19,200$
Cost of Goods Manufactured 437,395
Total Goods Available
\$456,595
Finished Goods (Nov. 30)
$(25,500)$
Cost of Goods Sold
\$431,095
125. The following information is for the Guthrie Manufacturing Company for November.

| Inventories | $\frac{B e g i n n i n g}{}$ | $\frac{\text { Ending }}{\$ 15,400}$ |
| :--- | :--- | :--- |
| Raw Material | $\$ 19,750$ | 32,200 |
| Work in Process | 35,350 | 27,900 |

Direct Labor (22,000 DLH @ \$14)

| Raw Material Purchases | $\$ 155,000$ | Insurance-Office | 2,750 |
| :--- | :--- | :--- | :--- |
| Indirect Labor | 11,600 | Office Supplies Expense | 1,050 |
| Factory Supplies Used | 475 | Insurance-Factory | 1,825 |
| Other Expenses: |  | Depr. Office Equipment | 3,900 |
| Depr.-Factory Equipment | 18,100 | Repair/Maintenance-Factory | 7,800 |

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

Manufacturing Costs:

| Raw Material (Nov. 1) | \$ 19,750 |  |
| :---: | :---: | :---: |
| Purchases | 155,000 |  |
| Raw Material Available | \$174,750 |  |
| Raw Material (Nov. 30) | $(15,400)$ |  |
| Raw Material Used |  | \$159,350 |
| Direct Labor (22,000 ${ }^{\text {² }} 14$ ) |  | 308,000 |
| Overhead: |  |  |
| Depr.-Factory Equipment | \$18,100 |  |
| Repairs/Maintenance-Factory | 7,800 |  |
| Indirect Labor | 11,600 |  |
| Insurance-Factory | 1,825 |  |
| Factory Supplies Used | 475 |  |
| Total Overhead |  | 39,800 |
| Total Manufacturing Costs |  | \$507,150 |
| Cost of Goods Manufactured: |  |  |
| Total Manufacturing Costs | \$507,150 |  |
| Work in Process (Nov. 1) | 35,350 |  |
| Work in Process (Nov. 30) | $(32,200)$ |  |
| Cost of Goods Manufactured | \$510,300 |  |
| Cost of Goods Sold: |  |  |
| Finished Goods (Nov. 1) | \$ 21,300 |  |
| Cost of Goods Manufactured | 510,300 |  |
| Total Goods Available | \$531,600 |  |
| Finished Goods (Nov. 30) | $(27,900)$ |  |
| Cost of Goods Sold | \$503,700 |  |

126. From the following information for the Norman Company, compute prime costs and conversion costs.

| Inventories | Beginning | Ending |
| :--- | :--- | :--- |
| ${ } }$ | $\$ 9,900$ | $\$ 7,600$ |
| 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 | $\underline{40,800}$ |  |
| Raw Material Available | $\$ 50,700$ |  |
| Raw Material (Ending) | $\underline{(7,600})$ | $\$ 43,100$ |
| Raw Material Used | $(23,600$ |  |
| Direct Labor |  | $\underline{324,500}$ |
| Prime Costs |  | $\underline{367,600}$ |
| Conversion Costs: |  | $\$ 324,500$ |
| Direct Labor (Above) | $\underline{21,750}$ |  |
| Overhead | $\underline{\$ 346,250}$ |  |

127. The following miscellaneous data has been collected for Bethany Manufacturing Company for the most recent year-end:

| Inventories: | $\underline{\text { Beginning }}$ | $\underline{\text { Ending }}$ |
| :--- | :--- | :--- |
| Raw material | $\$ 50,000$ | $\$ 55,000$ |
| Work in process | 40,000 | 45,000 |
| Finished goods | 60,000 | 50,000 |
| Costs recorded during the year: | $\$ 195,000$ |  |
| Purchases of raw material | 150,000 |  |
| Direct labor | 595,000 |  |

Required: Prepare statements of cost of goods manufactured and cost of goods sold showing how all unknown amounts were determined.

| BEGIN WIP |  | \$ 40,000 |  |
| :---: | :---: | :---: | :---: |
| + DM (1) |  | 190,000 |  |
| + DL |  | 150,000 |  |
| + OH |  |  | $=\$ 250,000$ |
| - END WIP |  | $(45,000)$ |  |
| $=$ COGM (2) |  | \$585,000 |  |
| (1) | BEG RM | \$ 50,000 |  |
|  | + PURCHASE | 195,000 |  |
|  | - END RM | (55,000) |  |
|  | $=\mathrm{DM}$ | \$190,000 |  |
| (2) | BEGIN FG | \$ 60,000 |  |
|  | + COGM |  | = \$585,000 |
|  | - END FG | $(50,000)$ |  |
|  | = COGS | \$595,000 |  |


| Bethany Manufacturing Company |  |  |  |
| :---: | :---: | :---: | :---: |
| Cost of Goods Manufactured |  |  |  |
| For Period Ending Month, Day, Year |  |  |  |
| Beginning WIP Inventory |  |  | \$ 40,000 |
| Raw Materials |  |  |  |
| Beginning Inventory | \$ 50,000 |  |  |
| + Purchases | 195,000 |  |  |
| Materials Available for Use | \$245,000 |  |  |
| - Ending Inventory | 55,000 |  |  |
| Raw Materials Used |  | \$190,000 |  |
| Direct Labor |  | 150,000 |  |
| Factory Overhead |  | 250,000 |  |
| Product Costs for Period |  |  | \$590,000 |
| Total Work in Process |  |  | \$630,000 |
| Ending Work in Process |  |  | 45,000 |
| Cost of Goods Manufactured |  |  | \$585,000 |
|  |  |  |  |
|  |  |  |  |
| Bethany Manufacturing Company |  |  |  |
| Cost of Goods Sold |  |  |  |
| For Period Ending Month, Day, Year |  |  |  |
| Beginning Finished Goods Inventory |  |  | \$ 60,000 |
| Cost of Goods Manufactured |  |  | 585,000 |
| Goods Available for Sale |  |  | \$645,000 |
| Less Ending Finished Goods Inventory |  |  | 50,000 |
| Cost of Goods Sold |  |  | \$595,000 |
|  |  |  |  |

128. The following information was taken from the records of the Baytown 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 | \$ ? |  |
|  |  |  |  |
|  |  |  |  |
| 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:

a. Determine the number of units that were completed and transferred to finished goods during the month.
b. Complete the estimate of the cost of work in process on July 31.
c. Compute cost of goods manufactured for the month.
d. Determine the cost of each unit completed during the month.
e. Determine the total amount debited to the Overhead Control accounts during the month.
a. $\quad 8,000$ SOLD $+2,000$ ENDING $F G=10,000$

UNITS
b. $\mathrm{DM} \quad \$ 3,0$

DC 2,00
OH
0
$=\$ 15,{ }^{\prime} \$ 2,000$
1,50 000/\$

- 20,00

0
\$6,5
c. $\quad \mathrm{DM}$

00
c. DM
$\$ 32$,
000
DL 20,0
00
$\mathrm{OH} \quad 15,0$
00

- END WIP
$-\overline{-}$
$=$ COGM

0) 

d. COGM/COMPLETE UNITS $=$
e. OH APPLIED
$\begin{array}{ll}\text { e. } & \text { OH APPLIED } \\ & + \text { OH UNDERAPPLIED }\end{array}$
ACTUAL OH
$\$ 60$,
500
$\$=$
60,5 \$6.05/
$\underline{00}$ UNIT
10,0
00
UNI
TS
\$15,
000
$\frac{8}{00}$
$\$ 15$, 800
129. The Silsbee Corporation had the following account balances:

| Raw Material | Manufactur <br> ing <br> Overhead |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 30,000 |  | $?$ |  | 385,000 | $?$ |
| Bal. $1 / 1$ | 420,000 |  |  |  |  |  |
|  |  |  |  |  |  |  |


| Bal. $12 / 31$ | 60,000 |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |




## Required:

a. What was the cost of raw material put into production during the year?
b. How much of the material from question 1 consisted of indirect material?
c. How much of the factory labor cost for the year consisted of indirect labor?
d. What was the cost of goods manufactured for the year?
e. What was the cost of goods sold for the year (before considering under- or overapplied overhead)?
f. If overhead is applied to production on the basis of direct material, what rate was in effect during the year?
g. Was manufacturing overhead under- or overapplied? By how much?
h. 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. | $\$ 390,000-\$ 320,000 \mathrm{DM}=\$ 70,000$ |  |
| c. | $\$ 175,000-\$ 110,000 \mathrm{DL}=\$ 65,000$ |  |
| d. | $\$ 810,000-\$ 10,000-\$ 130,000=\$ 720,000$ |  |
| e. | $\$ 40,000+\$ 81,00,000=125 \%$ DM Cost |  |
| f. | $\$ 400,000 / \$ 320,000=$ | $\$ 385,000$ |
| g. | OH Actual | $\underline{400,000}$ |
|  | OH Applied | $\$ 15,000$ |
| h. | OH Overapplied | $\$ 70,000$ |
|  | Beginning WIP | 320,000 |
|  | + DM | 110,000 |
|  | + DC | 400,000 |
|  | + OH | $\underline{90,000})$ |
|  | - Ending WIP | $\underline{\$ 810,000}$ |


| DM | $\$ 32,000$ |
| :--- | :--- |
| DL (To Balance) | 18,000 |
| FOH (1) | $\underline{40,000}$ |
| End WIP | $\underline{\$ 90,000}$ |
|  |  |
| (1) $\$ 32,000 \mathrm{~s}^{\prime} 125 \%=\$ 40,000$ |  |


[^0]:    a. Purchased raw material on account $\$ 45,500$.
    b. Put material into production: $\$ 28,000$ of direct material and $\$ 5,000$ of indirect material.
    c. Accrued payroll of $\$ 95,000$, of which 65 percent was direct and the remainder was indirect.
    d. Incurred and paid other overhead items of $\$ 42,000$.
    e. Transferred items costing $\$ 92,500$ to finished goods.
    f. Sold goods costing $\$ 79,900$ on account for $\$ 134,200$.

