

Managerial Accounting and Cost Concepts

True / False Questions

1. Selling costs can be either direct or indirect costs.

True False

2. A direct cost is a cost that cannot be easily traced to the particular cost object under consideration.

True False

3. Property taxes and insurance premiums paid on a factory building are examples of period costs.

True False

4. Conversion cost equals product cost less direct labor cost.

True False

5. Thread that is used in the production of mattresses is an indirect material that is therefore classified as manufacturing overhead.

True False

6. Direct labor is a part of prime cost, but not conversion cost.

True False

7. Conversion cost is the sum of direct labor cost and direct materials cost.

True False

8. Direct material costs are generally fixed costs.

True False

9. Product costs are recorded as expenses in the period in which the related products are sold.

True False

10. Depreciation on manufacturing equipment is a product cost.

True False

11. Manufacturing salaries and wages incurred in the factory are period costs.

True False

12. Depreciation on office equipment would be included in product costs.

True False

13. Rent on a factory building used in the production process would be classified as a product cost and as a fixed cost.

True False

14. A fixed cost remains constant if expressed on a unit basis.

True False

15. Total variable cost is expected to remain unchanged as activity changes within the relevant range.

True False

16. Country Charm Restaurant is open 24 hours a day and always has a fire going in the fireplace in the middle of its dining area. The cost of the firewood for this fire is fixed with respect to the number of meals served at the restaurant.

True False

17. Committed fixed costs represent organizational investments with a multi-year planning horizon that can't be significantly reduced even for short periods.

True False

18. Commissions paid to salespersons are a variable selling expense.

True False

19. Variable costs are costs that vary, in total, in direct proportion to changes in the volume or level of activity.

True False

20. The planning horizon for a committed fixed cost usually encompasses many years.

True False

21. Cost behavior is considered linear whenever a straight line is a reasonable approximation for the relation between cost and activity.

True False

22. The high-low method uses cost and activity data from just two periods to establish the formula for a mixed cost.

True False

23. The engineering approach to the analysis of mixed costs involves a detailed analysis of what cost behavior should be, based on an industrial engineer's evaluation of the production methods to be used, the materials specifications, labor requirements, equipment usage, production efficiency, power consumption, and so on.

True False

24. The contribution margin is the amount remaining from sales revenues after variable expenses have been deducted.

True False

25. A contribution format income statement for a merchandising company organizes costs into two categories—cost of goods sold and selling and administrative expenses.

True False

26. The traditional format income statement provides managers with an income statement that clearly distinguishes between fixed and variable costs and therefore aids planning, control, and decision making.

True False

27. In a contribution format income statement, the gross margin minus selling and administrative expenses equals net operating income.

True False

28. A traditional format income statement organizes costs on the basis of behavior.

True False

29. In a traditional format income statement for a merchandising company, the selling and administrative expenses report all period costs that have been expensed as incurred.

True False

30. The contribution format is widely used for preparing external financial statements.

True False

31. Contribution margin equals revenue minus all fixed costs.

True False

32. The potential benefit that is given up when one alternative is selected over another is called an opportunity cost.

True False

33. A cost that differs from one month to another is known as a differential cost.

True False

Multiple Choice Questions

34. The nursing station on the fourth floor of Central Hospital is responsible for the care of orthopedic surgery patients. The costs of prescription drugs administered by the nursing station to patients should be classified as:
- A. direct patient costs.
 - B. indirect patient costs.
 - C. overhead costs of the nursing station.
 - D. period costs of the hospital.
35. All of the following costs would be found in a company's accounting records except:
- A. sunk cost.
 - B. opportunity cost.
 - C. indirect costs.
 - D. direct costs.
36. The costs of the Accounting Department at Central Hospital would be considered by the Surgery Department to be:
- A. direct costs.
 - B. indirect costs.
 - C. incremental costs.
 - D. opportunity costs.

37. Which of the following is classified as a direct labor cost?

	Wages of assembly- line workers	Wages of a factory supervisor
A)	No	No
B)	Yes	Yes
C)	No	Yes
D)	Yes	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

38. In a manufacturing company, direct labor costs combined with direct materials costs are known as:

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

39. The property taxes on a factory building would be an example of:

	Prime Cost	Conversion Cost
A)	No	Yes
B)	Yes	No
C)	Yes	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

40. Which of the following would most likely be included as part of manufacturing overhead in the production of a wooden table?

- A. The amount paid to the individual who stains the table.
- B. The commission paid to the salesperson who sold the table.
- C. The cost of glue used in the table.
- D. The cost of the wood used in the table.

41. Property taxes on a manufacturing facility are classified as:

	Conversion cost	Period cost
A)	Yes	No
B)	Yes	Yes
C)	No	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

42. Indirect labor is a(n):

- A. Prime cost.
- B. Conversion cost.
- C. Period cost.
- D. Opportunity cost.

43. The salary paid to the maintenance supervisor in a manufacturing plant is an example of:

	Product Cost	Manufacturing Overhead
A)	No	Yes
B)	Yes	No
C)	Yes	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

44. All of the following would be classified as product costs except:

- A. property taxes on production equipment.
- B. insurance on factory machinery.
- C. salaries of the marketing staff.
- D. wages of machine operators.

45. The cost of direct materials cost is classified as a:

	Period cost	Product cost
A)	Yes	Yes
B)	No	No
C)	Yes	No
D)	No	Yes

- A. Option A
- B. Option B
- C. Option C
- D. Option D

46. Which of the following costs is classified as a prime cost?

	Direct materials	Indirect materials
A)	Yes	Yes
B)	No	No
C)	Yes	No
D)	No	Yes

- A. Option A
- B. Option B
- C. Option C
- D. Option D

47. Inventoriable costs are also known as:

- A. variable costs.
- B. conversion costs.
- C. product costs.
- D. fixed costs.

48. Fresh Wreath Corporation manufactures wreaths according to customer specifications and ships them to customers using United Parcel Service (UPS). Which two terms below describe the cost of shipping these wreaths?

- A. variable cost and product cost
- B. variable cost and period cost
- C. fixed cost and product cost
- D. fixed cost and period cost

49. If the level of activity increases within the relevant range:

- A. variable cost per unit and total fixed costs also increase.
- B. fixed cost per unit and total variable cost also increase.
- C. total cost will increase and fixed cost per unit will decrease.
- D. variable cost per unit and total cost also increase.

50. Within the relevant range:

- A. variable cost per unit decreases as production decreases.
- B. fixed cost per unit increases as production decreases.
- C. fixed cost per unit decreases as production decreases.
- D. variable cost per unit increases as production decreases.

51. Discretionary fixed costs:

- A. have a planning horizon that covers many years.
- B. may be reduced for short periods of time with minimal damage to the long-run goals of the organization.
- C. cannot be reduced for even short periods of time without making fundamental changes.
- D. are most effectively controlled through the effective utilization of facilities and organization.

52. When the activity level declines within the relevant range, what should happen with respect to the following?

	Fixed cost per unit	Variable cost per unit
A)	No change	Increase
B)	Increase	Increase
C)	Increase	No change
D)	No change	No change

- A. Option A
- B. Option B
- C. Option C
- D. Option D

53. Stott Company requires one full-time dock hand for every 500 packages loaded daily. The wages for these dock hands would be:

- A. variable.
- B. mixed.
- C. step-variable.
- D. curvilinear.

54. When the level of activity decreases, variable costs will:

- A. increase per unit.
- B. increase in total.
- C. decrease in total.
- D. decrease per unit.

55. Data for Cost A and Cost B appear below:

	Units Produced	Cost Per Unit	Total Cost
Cost A			
	1	?	\$10
	10	?	\$100
	100	?	\$1,000
	1,000	?	\$10,000
Cost B			
	1	\$5,000	?
	10	\$500	?
	100	\$50	?
	1,000	\$5	?

Which of the above best describes the behavior of Costs A and B?

- A. Cost A is fixed, Cost B is variable.
 - B. Cost A is variable, Cost B is fixed.
 - C. Both Cost A and Cost B are variable.
 - D. Both Cost A and Cost B are fixed.
56. Which of the following companies would have the highest proportion of variable costs in its cost structure?
- A. Public utility.
 - B. Airline.
 - C. Fast food outlet.
 - D. Architectural firm.

57. An example of a discretionary fixed cost would be:
- A. taxes on the factory.
 - B. depreciation on manufacturing equipment.
 - C. insurance.
 - D. research and development.
58. For planning, control, and decision-making purposes:
- A. fixed costs should be converted to a per unit basis.
 - B. discretionary fixed costs should be eliminated.
 - C. variable costs should be ignored.
 - D. mixed costs should be separated into their variable and fixed components.
59. Which of the following costs, if expressed on a per unit basis, would be expected to decrease as the level of production and sales increases?
- A. Sales commissions.
 - B. Fixed manufacturing overhead.
 - C. Variable manufacturing overhead.
 - D. Direct materials.
60. In describing the cost equation, $Y = a + bX$, "a" is:
- A. the dependent variable cost.
 - B. the independent variable the level of activity.
 - C. the total fixed cost.
 - D. the variable cost per unit of activity.

61. Which of the following is an example of a cost that is variable with respect to the number of units produced?

- A. Rent on the administrative office building.
- B. Rent on the factory building.
- C. Direct labor cost, where the direct labor workforce is adjusted to the actual production of the period.
- D. Salaries of top marketing executives.

62. Contribution margin means:

- A. what remains from total sales after deducting fixed expenses.
- B. what remains from total sales after deducting cost of goods sold.
- C. the sum of cost of goods sold and variable expenses.
- D. what remains from total sales after deducting all variable expenses.

63. The _____ is the amount remaining from sales revenue after all variable expenses have been deducted.

- A. cost structure
- B. gross margin
- C. contribution margin
- D. committed fixed cost

64. A sunk cost is:

- A. a cost which may be saved by not adopting an alternative.
- B. a cost which may be shifted to the future with little or no effect on current operations.
- C. a cost which cannot be avoided because it has already been incurred.
- D. a cost which does not entail any dollar outlay but which is relevant to the decision-making process.

65. The cost of factory machinery purchased last year is:
- A. an opportunity cost.
 - B. a differential cost.
 - C. a direct materials cost.
 - D. a sunk cost.
66. Abbott Company's manufacturing overhead is 20% of its total conversion costs. If direct labor is \$38,000 and if direct materials are \$23,000, the manufacturing overhead is:
- A. \$9,500
 - B. \$152,000
 - C. \$5,750
 - D. \$15,250
67. During the month of April, direct labor cost totaled \$15,000 and direct labor cost was 30% of prime cost. If total manufacturing costs during April were \$79,000, the manufacturing overhead was:
- A. \$35,000
 - B. \$29,000
 - C. \$50,000
 - D. \$129,000
68. In April direct labor was 70% of conversion cost. If the manufacturing overhead for the month was \$42,000 and the direct materials cost was \$28,000, the direct labor cost was:
- A. \$98,000
 - B. \$65,333
 - C. \$18,000
 - D. \$12,000

69. A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is \$2,400 and is paid at the beginning of the first year. Seventy percent of the premium applies to manufacturing operations and thirty percent applies to selling and administrative activities. What amounts should be considered product and period costs respectively for the first year of coverage?

	Product	Period
A)	\$800	\$0
B)	\$0	\$800
C)	\$560	\$240
D)	\$240	\$560

- A. Option A
- B. Option B
- C. Option C
- D. Option D

70. The following costs were incurred in April:

Direct materials.....	\$18,000
Direct labor.....	\$21,000
Manufacturing overhead.....	\$33,000
Selling expenses	\$14,000
Administrative expenses.....	\$19,000

Conversion costs during the month totaled:

- A. \$39,000
- B. \$54,000
- C. \$105,000
- D. \$51,000

71. The following costs were incurred in April:

Direct materials.....	\$29,000
Direct labor.....	\$24,000
Manufacturing overhead.....	\$14,000
Selling expenses	\$18,000
Administrative expenses.....	\$18,000

Prime costs during the month totaled:

- A. \$53,000
 - B. \$67,000
 - C. \$38,000
 - D. \$103,000
72. At a volume of 8,000 units, Pwerson Company incurred \$32,000 in factory overhead costs, including \$12,000 in fixed costs. If volume increases to 9,000 units and both 8,000 units and 9,000 units are within the relevant range, then the company would expect to incur total factory overhead costs of:
- A. \$22,500
 - B. \$32,000
 - C. \$34,500
 - D. \$20,000

73. The following data pertains to activity and costs for two months:

	June	July
Activity level in units.....	10,000	12,000
Direct materials.....	\$16,000	\$?
Fixed factory rent.....	12,000	?
Manufacturing overhead....	10,000	?
Total cost.....	<u>\$38,000</u>	<u>\$42,900</u>

Assuming that these activity levels are within the relevant range, the manufacturing overhead for July was:

- A. \$10,000
 - B. \$11,700
 - C. \$19,000
 - D. \$9,300
74. At an activity level of 4,000 machine-hours in a month, Curt Corporation's total variable production engineering cost is \$154,200 and its total fixed production engineering cost is \$129,000. What would be the total production engineering cost per unit, both fixed and variable, at an activity level of 4,300 machine-hours in a month? Assume that this level of activity is within the relevant range.
- A. \$68.33
 - B. \$68.55
 - C. \$70.80
 - D. \$65.86
75. Ricwy Corporation uses the cost formula $Y = \$4,800 + \$0.40X$ for the maintenance cost, where X is machine-hours. The August budget is based on 9,000 hours of planned machine time. Maintenance cost expected to be incurred during August is:
- A. \$4,800
 - B. \$3,600
 - C. \$8,400
 - D. \$1,200

76. Given the cost formula $Y = \$18,000 + \$6X$, total cost at an activity level of 9,000 units would be:

- A. \$72,000
- B. \$18,000
- C. \$36,000
- D. \$54,000

77. At an activity level of 6,900 units in a month, Zelinski Corporation's total variable maintenance and repair cost is \$408,756 and its total fixed maintenance and repair cost is \$230,253. What would be the total maintenance and repair cost, both fixed and variable, at an activity level of 7,100 units in a month? Assume that this level of activity is within the relevant range.

- A. \$648,270
- B. \$639,009
- C. \$650,857
- D. \$657,531

78. Given the cost formula, $Y = \$7,000 + \$1.80X$, total cost for an activity level of 4,000 units would be:

- A. \$7,000
- B. \$200
- C. \$7,200
- D. \$14,200

79. Kaelker Corporation reports that at an activity level of 7,000 units, its total variable cost is \$590,730 and its total fixed cost is \$372,750. What would be the total cost, both fixed and variable, at an activity level of 7,100 units? Assume that this level of activity is within the relevant range.

- A. \$963,480
- B. \$977,244
- C. \$971,919
- D. \$970,362

80. Eddy Corporation has provided the following production and total cost data for two levels of monthly production volume. The company produces a single product.

Production volume	6,000 units	7,000 units
Direct materials.....	\$582,600	\$679,700
Direct labor.....	\$136,200	\$158,900
Manufacturing overhead.....	\$691,800	\$714,700

The best estimate of the total variable manufacturing cost per unit is:

- A. \$22.90
- B. \$119.80
- C. \$142.70
- D. \$97.10

81. Cardiv Corporation has provided the following production and average cost data for two levels of monthly production volume. The company produces a single product.

Production volume	4,000 units	5,000 units
Direct materials.....	\$85.80 per unit	\$85.80 per unit
Direct labor.....	\$56.10 per unit	\$56.10 per unit
Manufacturing overhead.....	\$73.60 per unit	\$62.10 per unit

The best estimate of the total cost to manufacture 4,300 units is closest to:

- A. \$877,200
- B. \$909,400
- C. \$901,925
- D. \$926,650

82. Harris Corporation is a wholesaler that sells a single product. Management has provided the following cost data for two levels of monthly sales volume. The company sells the product for \$84.40 per unit.

Sales volume (units)	5,000	6,000
Cost of sales	\$285,000	\$342,000
Selling and administrative costs	\$107,500	\$120,000

The best estimate of the total variable cost per unit is:

- A. \$77.00
- B. \$57.00
- C. \$69.50
- D. \$78.50

83. Werner Brothers, Inc., used the high-low method to derive its cost formula for electrical power cost. According to the cost formula, the variable cost per unit of activity is \$2 per machine-hour. Total electrical power cost at the high level of activity was \$9,400 and at the low level of activity was \$9,000. If the high level of activity was 2,200 machine hours, then the low level of activity was:

- A. 1,800 machine hours
- B. 1,900 machine hours
- C. 2,000 machine hours
- D. 1,700 machine hours

84. Davis Corporation has provided the following production and total cost data for two levels of monthly production volume. The company produces a single product.

Production volume	1,000 units	2,000 units
Direct materials.....	\$44,200	\$88,400
Direct labor.....	\$37,300	\$74,600
Manufacturing overhead.....	\$48,500	\$62,200

The best estimate of the total monthly fixed manufacturing cost is:

- A. \$130,000
- B. \$177,600
- C. \$34,800
- D. \$225,200

85. Anderson Corporation has provided the following production and average cost data for two levels of monthly production volume. The company produces a single product.

Production volume	4,000 units	5,000 units
Direct materials.....	\$99.20 per unit	\$99.20 per unit
Direct labor.....	\$45.50 per unit	\$45.50 per unit
Manufacturing overhead.....	\$94.00 per unit	\$77.60 per unit

The best estimate of the total monthly fixed manufacturing cost is:

- A. \$388,000
- B. \$954,800
- C. \$376,000
- D. \$328,000

86. Farmington Corporation has provided the following production and total cost data for two levels of monthly production volume. The company produces a single product.

Production volume	6,000 units	7,000 units
Direct materials.....	\$195,000	\$227,500
Direct labor.....	\$113,400	\$132,300
Manufacturing overhead.....	\$913,200	\$931,700

The best estimate of the total cost to manufacture 6,300 units is closest to:

- A. \$1,162,350
- B. \$1,242,570
- C. \$1,222,515
- D. \$1,282,680

87. Baker Corporation has provided the following production and average cost data for two levels of monthly production volume. The company produces a single product.

Production volume	1,000 units	3,000 units
Direct materials.....	\$30.90 per unit	\$30.90 per unit
Direct labor.....	\$40.20 per unit	\$40.20 per unit
Manufacturing overhead.....	\$64.60 per unit	\$33.80 per unit

The best estimate of the total variable manufacturing cost per unit is:

- A. \$89.50
- B. \$18.40
- C. \$71.10
- D. \$30.90

88. Gambino Corporation is a wholesaler that sells a single product. Management has provided the following cost data for two levels of monthly sales volume. The company sells the product for \$138.80 per unit.

Sales volume (units)	6,000	7,000
Cost of sales	\$369,000	\$430,500
Selling and administrative costs	\$407,400	\$418,600

The best estimate of the total monthly fixed cost is:

- A. \$776,400
- B. \$340,200
- C. \$812,750
- D. \$849,100

89. Iaci Corporation is a wholesaler that sells a single product. Management has provided the following cost data for two levels of monthly sales volume. The company sells the product for \$133.60 per unit.

Sales volume (units)	4,000	5,000
Cost of sales	\$383,600	\$479,500
Selling and administrative costs	\$124,400	\$136,000

The best estimate of the total contribution margin when 4,300 units are sold is:

- A. \$112,230
- B. \$162,110
- C. \$28,380
- D. \$45,150

90. Maintenance costs at a Whetsel Corporation factory are listed below:

	Machine-Hours	Maintenance Cost
March	3,135	\$48,340
April	3,095	\$47,993
May	3,133	\$48,345
June	3,157	\$48,548
July.....	3,065	\$47,733
August	3,076	\$47,830
September	3,084	\$47,880
October.....	3,125	\$48,247
November	3,098	\$48,014

Management believes that maintenance cost is a mixed cost that depends on machine-hours. Use the high-low method to estimate the variable and fixed components of this cost. Compute the variable component first and round off to the nearest whole cent. Compute the fixed component second and round off to the nearest whole dollar. These estimates would be closest to:

- A. \$8.86 per machine-hour; \$20,577 per month
- B. \$0.11 per machine-hour; \$48,192 per month
- C. \$15.48 per machine-hour; \$48,103 per month
- D. \$8.81 per machine-hour; \$20,718 per month

91. The following data pertains to activity and utility cost for two recent periods:

Activity level (units)	8,000	5,000
Utility cost.....	\$8,000	\$6,150

Utility cost is a mixed cost with both fixed and variable components. Using the high-low method, the cost formula for utility cost is:

- A. $Y = \$1.00 X$
- B. $Y = \$1.25 X$
- C. $Y = \$4,000 + \$0.50 X$
- D. $Y = \$1,500 + \$1.25 X$

92. The following data pertains to activity and maintenance cost for two recent periods:

Activity level (units).....	5,000	4,000
Maintenance cost.....	\$16,750	\$15,000

Maintenance cost is a mixed cost with both fixed and variable components. Using the high-low method, the cost formula for maintenance cost is:

- A. $Y = \$8,000 + \$1.75 X$
- B. $Y = \$3.75 X$
- C. $Y = \$1,750 + \$3.35 X$
- D. $Y = \$3.35 X$

93. Electrical costs at one of Kantola Corporation's factories are listed below:

	Machine-Hours	Electrical Cost
February	3,570	\$36,405
March	3,580	\$36,493
April.....	3,553	\$36,302
May	3,627	\$36,833
June	3,625	\$36,800
July.....	3,565	\$36,366
August	3,548	\$36,237
September	3,542	\$36,213
October.....	3,593	\$36,577

Management believes that electrical cost is a mixed cost that depends on machine-hours. Use the high-low method to estimate the variable and fixed components of this cost. Compute the variable component first, rounding off to the nearest whole cent. Then compute the fixed component, rounding off to the nearest whole dollar. Those estimates are closest to:

- A. \$0.14 per machine-hour; \$36,336 per month
- B. \$10.19 per machine-hour; \$36,470 per month
- C. \$7.48 per machine-hour; \$9,708 per month
- D. \$7.29 per machine-hour; \$10,392 per month

94. Oaklis Company has provided the following data for maintenance cost:

	Prior Year	Current Year
Machine hours.....	10,000	12,000
Maintenance cost.....	\$24,000	\$27,600

Maintenance cost is a mixed cost with variable and fixed components. The fixed and variable components of maintenance cost are closest to:

- A. \$24,000 per year; \$2.30 per machine hour
 - B. \$6,000 per year; \$1.80 per machine hour
 - C. \$6,000 per year; \$2.30 per machine hour
 - D. \$24,000 per year; \$1.80 per machine hour
95. A soft drink bottler incurred the following factory utility cost: \$3,936 for 800 cases bottled and \$3,988 for 900 cases bottled. Factory utility cost is a mixed cost containing both fixed and variable components. The variable factory utility cost per case bottled is closest to:
- A. \$4.92
 - B. \$0.52
 - C. \$4.43
 - D. \$4.66

96. Supply costs at Chobot Corporation's chain of gyms are listed below:

	Client-Visits	Supply Cost
January.....	12,183	\$26,642
February.....	12,408	\$26,853
March.....	12,232	\$26,675
April.....	12,597	\$27,054
May.....	12,527	\$26,988
June.....	12,608	\$27,064
July.....	12,143	\$26,585
August.....	12,005	\$26,454
September.....	11,944	\$26,393

Management believes that supply cost is a mixed cost that depends on client-visits. Use the high-low method to estimate the variable and fixed components of this cost. Compute the variable component first, rounding off to the nearest whole cent. Then compute the fixed component, rounding off to the nearest whole dollar. Those estimates are closest to:

- A. \$2.18 per client-visit; \$26,745 per month
- B. \$1.01 per client-visit; \$14,330 per month
- C. \$1.04 per client-visit; \$13,949 per month
- D. \$0.99 per client-visit; \$14,607 per month

97. Gabat Inc. is a merchandising company. Last month the company's merchandise purchases totaled \$67,000. The company's beginning merchandise inventory was \$19,000 and its ending merchandise inventory was \$22,000. What was the company's cost of goods sold for the month?

- A. \$108,000
- B. \$67,000
- C. \$64,000
- D. \$70,000

98. Haab Inc. is a merchandising company. Last month the company's cost of goods sold was \$66,000. The company's beginning merchandise inventory was \$17,000 and its ending merchandise inventory was \$11,000. What was the total amount of the company's merchandise purchases for the month?

- A. \$72,000
- B. \$66,000
- C. \$94,000
- D. \$60,000

The following cost data pertain to the operations of Rademaker Department Stores, Inc., for the month of March.

Corporate headquarters building lease.....	\$80,000
Cosmetics Department sales commissions--Northridge Store	\$7,000
Corporate legal office salaries.....	\$75,000
Store manager's salary-Northridge Store.....	\$11,000
Heating-Northridge Store.....	\$11,000
Cosmetics Department cost of sales--Northridge Store.....	\$83,000
Central warehouse lease cost.....	\$17,000
Store security-Northridge Store.....	\$11,000
Cosmetics Department manager's salary--Northridge Store.....	\$4,000

The Northridge Store is just one of many stores owned and operated by the company. The Cosmetics Department is one of many departments at the Northridge Store. The central warehouse serves all of the company's stores.

99. What is the total amount of the costs listed above that are direct costs of the Cosmetics Department?

- A. \$83,000
- B. \$94,000
- C. \$90,000
- D. \$127,000

100. What is the total amount of the costs listed above that are NOT direct costs of the Northridge Store?

- A. \$172,000
- B. \$33,000
- C. \$80,000
- D. \$94,000

The following cost data pertain to the operations of Bouffard Department Stores, Inc., for the month of May.

Corporate legal office salaries.....	\$68,000
Shoe Department cost of sales--Brentwood Store	\$29,000
Corporate headquarters building lease	\$86,000
Store manager's salary--Brentwood Store	\$12,000
Shoe Department sales commissions--Brentwood Store.....	\$5,000
Store utilities--Brentwood Store.....	\$10,000
Shoe Department manager's salary--Brentwood Store	\$4,000
Central warehouse lease cost.....	\$7,000
Janitorial costs--Brentwood Store.....	\$10,000

The Brentwood Store is just one of many stores owned and operated by the company. The Shoe Department is one of many departments at the Brentwood Store. The central warehouse serves all of the company's stores.

101. What is the total amount of the costs listed above that are direct costs of the Shoe Department?

- A. \$38,000
- B. \$29,000
- C. \$70,000
- D. \$34,000

102. What is the total amount of the costs listed above that are NOT direct costs of the Brentwood Store?

- A. \$161,000
- B. \$86,000
- C. \$32,000
- D. \$38,000

Management of Lewallen Corporation has asked your help as an intern in preparing some key reports for September. Direct materials cost was \$57,000, direct labor cost was \$43,000, and manufacturing overhead was \$71,000. Selling expense was \$15,000 and administrative expense was \$32,000.

103. The conversion cost for September was:

- A. \$114,000
- B. \$131,000
- C. \$171,000
- D. \$103,000

104. The prime cost for September was:

- A. \$114,000
- B. \$100,000
- C. \$103,000
- D. \$47,000

Abare Corporation reported the following data for the month of December:

Direct materials.....	\$63,000
Direct labor cost.....	\$52,000
Manufacturing overhead.....	\$77,000
Selling expense.....	\$26,000
Administrative expense.....	\$36,000

105. The conversion cost for December was:

- A. \$134,000
- B. \$109,000
- C. \$192,000
- D. \$129,000

106. The prime cost for December was:

- A. \$129,000
- B. \$115,000
- C. \$109,000
- D. \$62,000

Krimton Corporation's manufacturing costs last year consisted of \$150,000 of direct materials, \$200,000 of direct labor, \$40,000 of variable manufacturing overhead, and \$25,000 of fixed manufacturing overhead.

107. Prime cost was:

- A. \$150,000
- B. \$190,000
- C. \$350,000
- D. \$415,000

108. Conversion cost was:

- A. \$200,000
- B. \$240,000
- C. \$265,000
- D. \$415,000

A partial listing of costs incurred during December at Rooks Corporation appears below:

Factory supplies	\$7,000
Administrative wages and salaries	\$92,000
Direct materials.....	\$176,000
Sales staff salaries.....	\$32,000
Factory depreciation	\$52,000
Corporate headquarters building rent	\$47,000
Indirect labor	\$23,000
Marketing.....	\$136,000
Direct labor.....	\$82,000

109. The total of the period costs listed above for December is:

- A. \$82,000
- B. \$340,000
- C. \$389,000
- D. \$307,000

110. The total of the manufacturing overhead costs listed above for December is:

- A. \$30,000
- B. \$82,000
- C. \$647,000
- D. \$340,000

111. The total of the product costs listed above for December is:

- A. \$340,000
- B. \$82,000
- C. \$647,000
- D. \$307,000

A partial listing of costs incurred at Gilhooly Corporation during September appears below:

Direct materials.....	\$183,000
Utilities, factory.....	\$9,000
Administrative salaries.....	\$90,000
Indirect labor.....	\$25,000
Sales commissions.....	\$33,000
Depreciation of production equipment.....	\$25,000
Depreciation of administrative equipment.....	\$32,000
Direct labor.....	\$124,000
Advertising.....	\$148,000

112. The total of the manufacturing overhead costs listed above for September is:

- A. \$669,000
- B. \$366,000
- C. \$34,000
- D. \$59,000

113. The total of the product costs listed above for September is:

- A. \$59,000
- B. \$366,000
- C. \$669,000
- D. \$303,000

114. The total of the period costs listed above for September is:

- A. \$303,000
- B. \$59,000
- C. \$366,000
- D. \$362,000

At a sales volume of 37,000 units, Maks Corporation's property taxes (a cost that is fixed with respect to sales volume) total \$802,900.

115. To the nearest whole dollar, what should be the total property taxes at a sales volume of 39,700 units? (Assume that this sales volume is within the relevant range.)

- A. \$802,900
- B. \$748,295
- C. \$832,195
- D. \$861,490

116. To the nearest whole cent, what should be the average property tax per unit at a sales volume of 40,300 units? (Assume that this sales volume is within the relevant range.)

- A. \$21.70
- B. \$20.22
- C. \$19.92
- D. \$20.81

Corcetti Company manufactures and sells prewashed denim jeans. Large rolls of denim cloth are purchased and are first washed in a giant washing machine. After the cloth is dried, it is cut up into jean pattern shapes and then sewn together. The completed jeans are sold to various retail chains.

117. Which of the following terms could be used to correctly describe the cost of the soap used to wash the denim cloth?

	Direct Cost	Product Cost
A)	Yes	Yes
B)	Yes	No
C)	No	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

118. Which of the following terms could be used to correctly describe the wages paid to the workers that cut up the cloth into the jean pattern shapes?

	Conversion Cost	Variable Cost
A)	Yes	Yes
B)	Yes	No
C)	No	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

119. Which of the following terms could be used to correctly describe the cost of the thread used to sew the jeans together?

	Manufacturing Overhead Cost	Fixed Cost
A)	Yes	Yes
B)	Yes	No
C)	No	Yes
D)	No	No

- A. Option A
- B. Option B
- C. Option C
- D. Option D

At an activity level of 8,300 machine-hours in a month, Baudry Corporation's total variable maintenance cost is \$220,448 and its total fixed maintenance cost is \$556,764.

120. What would be the total variable maintenance cost at an activity level of 8,600 machine-hours in a month? Assume that this level of activity is within the relevant range.

- A. \$777,212
- B. \$220,448
- C. \$576,888
- D. \$228,416

121. What would be the average fixed maintenance cost per unit at an activity level of 8,600 machine-hours in a month? Assume that this level of activity is within the relevant range.

- A. \$93.64
- B. \$67.08
- C. \$64.74
- D. \$75.15

Emerton Corporation leases its corporate headquarters building. This lease cost is fixed with respect to the company's sales volume. In a recent month in which the sales volume was 32,000 units, the lease cost was \$716,800.

122. To the nearest whole dollar, what should be the total lease cost at a sales volume of 30,900 units in a month? (Assume that this sales volume is within the relevant range.)

- A. \$742,317
- B. \$692,160
- C. \$704,480
- D. \$716,800

123. To the nearest whole cent, what should be the average lease cost per unit at a sales volume of 34,400 units in a month? (Assume that this sales volume is within the relevant range.)

- A. \$23.20
- B. \$21.62
- C. \$20.84
- D. \$22.40

Hadrana Corporation reports that at an activity level of 5,500 units, its total variable cost is \$275,330 and its total fixed cost is \$86,240.

124. What would be the total variable cost at an activity level of 5,600 units? Assume that this level of activity is within the relevant range.

- A. \$275,330
- B. \$361,570
- C. \$87,808
- D. \$280,336

125. What would be the average fixed cost per unit at an activity level of 5,600 units? Assume that this level of activity is within the relevant range.

- A. \$32.27
- B. \$15.68
- C. \$65.74
- D. \$15.40

At a sales volume of 30,000 units, Carne Company's total fixed costs are \$30,000 and total variable costs are \$45,000. The relevant range is 20,000 to 40,000 units.

126. If Carne Company were to sell 32,000 units, the total expected cost would be:

- A. \$75,000
- B. \$78,000
- C. \$80,000
- D. \$77,000

127. If Carne Company were to sell 40,000 units, the total expected cost per unit would be:

- A. \$2.50
- B. \$2.25
- C. \$2.13
- D. \$1.88

At a sales volume of 35,000 units, Cly Corporation's sales commissions (a cost that is variable with respect to sales volume) total \$525,000.

128. To the nearest whole dollar, what should be the total sales commissions at a sales volume of 36,100 units? (Assume that this sales volume is within the relevant range.)

- A. \$525,000
- B. \$509,003
- C. \$533,250
- D. \$541,500

129. To the nearest whole cent, what should be the average sales commission per unit at a sales volume of 33,600 units? (Assume that this sales volume is within the relevant range.)

- A. \$14.54
- B. \$15.00
- C. \$15.63
- D. \$15.32

Kodama Corporation staffs a helpline to answer questions from customers. The costs of operating the helpline are variable with respect to the number of calls in a month. At a volume of 30,000 calls in a month, the costs of operating the helpline total \$369,000.

130. To the nearest whole dollar, what should be the total cost of operating the helpline costs at a volume of 33,800 calls in a month? (Assume that this call volume is within the relevant range.)

- A. \$369,000
- B. \$327,515
- C. \$392,370
- D. \$415,740

131. To the nearest whole cent, what should be the average cost of operating the helpline per call at a volume of 31,300 calls in a month? (Assume that this call volume is within the relevant range.)

- A. \$12.30
- B. \$11.79
- C. \$10.92
- D. \$12.05

Erkkila Inc. reports that at an activity level of 6,400 machine-hours in a month, its total variable inspection cost is \$423,680 and its total fixed inspection cost is \$154,368.

132. What would be the average fixed inspection cost per unit at an activity level of 6,700 machine-hours in a month? Assume that this level of activity is within the relevant range.

- A. \$23.04
- B. \$90.32
- C. \$24.12
- D. \$45.83

133. What would be the total variable inspection cost at an activity level of 6,700 machine-hours in a month? Assume that this level of activity is within the relevant range.

- A. \$423,680
- B. \$443,540
- C. \$161,604
- D. \$578,048

Comparative income statements for Tudor Retailing Company for the last two months are presented below:

	September	October
Sales in units	5,000	7,000
Sales revenue	\$100,000	\$140,000
Cost of goods sold	<u>40,000</u>	<u>56,000</u>
Gross margin	60,000	84,000
Selling and administrative expenses:		
Shipping expense	7,500	10,500
Clerical expense	10,000	12,000
Maintenance expense	<u>17,000</u>	<u>17,000</u>
Total selling and administrative expense	<u>34,500</u>	<u>39,500</u>
Net operating income	<u>\$ 25,500</u>	<u>\$ 44,500</u>

134. Which of the following classifications best describes the behavior of shipping expense?

- A. Mixed
- B. Variable
- C. Fixed
- D. none of these

135. Which of the following classifications best describes the behavior of clerical expense?

- A. Mixed
- B. Variable
- C. Fixed
- D. none of these

136. If the Tudor Retailing Company uses the high-low method of analysis, the total monthly fixed cost for Tudor Retailing Company would be estimated to be:

- A. \$34,500
- B. \$17,000
- C. \$27,000
- D. \$22,000

137. If the Tudor Retailing Company uses the high-low method of analysis, the total selling and administrative expense if Tudor Retailing Company sells 6,500 units during a month would be estimated to be:

- A. \$37,000
- B. \$44,850
- C. \$38,250
- D. \$36,679

Comco, Inc. has accumulated the following data for the cost of maintenance on its machinery for the last four months:

	Machine Hours	Maintenance Cost
September	21,000	\$26,020
October.....	18,500	\$24,600
November	15,000	\$22,300
December	19,000	\$25,100

Assume that the relevant range includes all of the activity levels mentioned in this problem.

138. Assuming Comco uses the high-low method of analysis, the fixed cost of maintenance would be estimated to be:

- A. \$14,500
- B. \$5,020
- C. \$13,000
- D. \$12,320

139. Assuming Comco uses the high-low method of analysis, if machine hours are budgeted to be 20,000 hours then the budgeted total maintenance cost would be expected to be:

- A. \$25,400
- B. \$25,560
- C. \$23,700
- D. \$24,720

The following production and average cost data for two levels of monthly production volume have been supplied by a company that produces a single product:

Production volume	1,000 units	3,000 units
Direct materials.....	\$13.20 per unit	\$13.20 per unit
Direct labor.....	\$14.50 per unit	\$14.50 per unit
Manufacturing overhead.....	\$65.40 per unit	\$29.40 per unit

140. The best estimate of the total monthly fixed manufacturing cost is:

- A. \$65,400
- B. \$88,200
- C. \$93,100
- D. \$54,000

141. The best estimate of the total variable manufacturing cost per unit is:

- A. \$39.10
- B. \$27.70
- C. \$11.40
- D. \$13.20

142. The best estimate of the total cost to manufacture 1,200 units is closest to:

- A. \$68,520
- B. \$100,920
- C. \$111,720
- D. \$90,120

Frank Company operates a cafeteria for its employees. The number of meals served each week over the last seven weeks, along with the total costs of operating the cafeteria are given below:

	Meals served	Cafeteria costs
Week 1....	1,500	\$4,800
Week 2....	1,600	\$5,080
Week 3....	1,800	\$5,280
Week 4....	1,450	\$4,900
Week 5....	1,200	\$4,000
Week 6....	1,650	\$5,100
Week 7....	1,900	\$5,400

Assume that the relevant range includes all of the activity levels mentioned in this problem.

143. Using the high-low method of analysis, the variable cost per meal served in the cafeteria would be estimated to be:

- A. \$1.50
- B. \$2.00
- C. \$2.80
- D. \$1.00

144. Assume that the cafeteria expects to serve 1,850 meals during Week 8. Using the high-low method, the expected total cost of the cafeteria would be:

- A. \$5,340
- B. \$5,180
- C. \$5,300
- D. \$4,375

Baker Corporation has provided the following production and total cost data for two levels of monthly production volume. The company produces a single product.

Production volume	6,000 units	7,000 units
Direct materials	\$194,400	\$226,800
Direct labor	\$74,400	\$86,800
Manufacturing overhead	\$758,400	\$779,800

145. The best estimate of the total monthly fixed manufacturing cost is:

- A. \$1,027,200
- B. \$1,060,300
- C. \$1,093,400
- D. \$630,000

146. The best estimate of the total variable manufacturing cost per unit is:

- A. \$32.40
- B. \$44.80
- C. \$66.20
- D. \$21.40

147. The best estimate of the total cost to manufacture 6,300 units is closest to:

- A. \$984,060
- B. \$1,031,310
- C. \$1,047,060
- D. \$1,078,560

Callis Corporation is a wholesaler that sells a single product. Management has provided the following cost data for two levels of monthly sales volume. The company sells the product for \$141.60 per unit.

Sales volume (units)	5,000	6,000
Cost of sales	\$265,500	\$318,600
Selling and administrative costs	\$393,500	\$406,800

148. The best estimate of the total monthly fixed cost is:

- A. \$692,200
- B. \$725,400
- C. \$659,000
- D. \$327,000

149. The best estimate of the total variable cost per unit is:

- A. \$131.80
- B. \$53.10
- C. \$66.40
- D. \$120.90

150. The best estimate of the total contribution margin when 5,300 units are sold is:

- A. \$51,940
- B. \$469,050
- C. \$109,710
- D. \$398,560

Bee Company is a honey wholesaler. An income statement and other data for the second quarter of the year are given below:

Bee Company
Income Statement
For the Quarter Ended June 30

Sales		\$960,000
Cost of goods sold		420,000
Gross margin		540,000
Selling and administrative expenses:		
Selling	\$200,000	
Administrative	75,000	275,000
Net operating income		\$265,000

Other data:
 Average selling price \$60 per unit
 Selling expenses Fixed selling expenses plus 8% of sales
 Administrative expense Fixed administrative expenses plus \$2 per unit

151. Bee Company's net operating income for the second quarter using the contribution approach is:

- A. \$156,200
- B. \$685,000
- C. \$431,200
- D. \$265,000

152. Bee Company's contribution margin for the second quarter is:

- A. \$463,200
- B. \$540,000
- C. \$851,200
- D. \$431,200

153. Bee Company's cost formula for total selling and administrative expenses, with "X" equal to the number of units sold would be:

- A. $Y = \$123,200 + \$4.80X$
- B. $Y = \$123,200 + \$6.80X$
- C. $Y = \$275,000 + \$4.80X$
- D. $Y = \$166,200 + \$6.80X$

154. If 24,000 units are sold during the third quarter and this activity is within the relevant range, Bee Company's expected contribution margin would be:

- A. \$646,800
- B. \$762,000
- C. \$810,000
- D. \$760,080

Electrical costs at one of Reifel Corporation's factories are listed below:

	Machine-Hours	Electrical Cost
March	413	\$7,371
April	506	\$7,740
May	435	\$7,447
June	486	\$7,660
July	499	\$7,704
August	461	\$7,563
September	467	\$7,571
October	458	\$7,522
November	425	\$7,403

Management believes that electrical cost is a mixed cost that depends on machine-hours.

155. Using the high-low method, the estimate of the variable component of electrical cost per machine-hour is closest to:

- A. \$0.12
- B. \$20.38
- C. \$7.98
- D. \$3.97

156. Using the high-low method, the estimate of the fixed component of electrical cost per month is closest to:

- A. \$7,371
- B. \$5,731
- C. \$5,875
- D. \$5,840

Cardillo Inc., an escrow agent, has provided the following data concerning its office expenses:

	Escrows Completed	Office Expenses
January.....	99	\$13,181
February.....	111	\$13,598
March.....	129	\$14,239
April.....	133	\$14,357
May.....	152	\$15,095
June.....	104	\$13,335
July.....	118	\$13,847
August.....	100	\$13,211
September.....	103	\$13,283

Management believes that office expense is a mixed cost that depends on the number of escrows completed. Note: Real estate purchases usually involve the services of an escrow agent that holds funds and prepares documents to complete the transaction.

157. Using the high-low method, the estimate of the variable component of office expense per escrow completed is closest to:

- A. \$26.75
- B. \$118.23
- C. \$36.11
- D. \$72.49

158. Using the high-low method, the estimate of the fixed component of office expense per month is closest to:

- A. \$9,606
- B. \$13,485
- C. \$13,181
- D. \$13,793

Data concerning Nelson Company's activity for the first six months of the year appear below:

	Machine Hours	Electrical Cost
January	4,000	\$3,120
February	6,000	\$4,460
March	4,800	\$3,500
April	3,800	\$3,040
May	3,600	\$2,900
June	4,200	\$3,200

159. Using the high-low method of analysis, the estimated variable electrical cost per machine hour is:

- A. \$0.65
- B. \$0.40
- C. \$0.70
- D. \$0.67

160. Using the high-low method of analysis, the estimated monthly fixed component of the electrical cost is:

- A. \$1,520
- B. \$440
- C. \$260
- D. \$560

Inspection costs at one of Luliano Corporation's factories are listed below:

	Units Produced	Inspection Cost
February	905	\$16,212
March	949	\$16,600
April	911	\$16,265
May	895	\$16,110
June	917	\$16,294
July	902	\$16,180
August	919	\$16,332
September	859	\$15,760
October	898	\$16,138

Management believes that inspection cost is a mixed cost that depends on units produced.

161. Using the high-low method, the estimate of the variable component of inspection cost per unit produced is closest to:

- A. \$10.57
- B. \$0.11
- C. \$17.89
- D. \$9.33

162. Using the high-low method, the estimate of the fixed component of inspection cost per month is closest to:

- A. \$16,210
- B. \$7,746
- C. \$15,761
- D. \$16,111

Farnor, Inc., would like to estimate the variable and fixed components of its electrical costs and has compiled the following data for the last four months of operations.

	Machine Hours	Electrical Cost
January	30	\$75
February	42	\$90
March	35	\$81
April	20	\$68

163. Using the high-low method of analysis, the estimated variable cost per machine hour for electricity is closest to:

- A. \$3.40
- B. \$2.14
- C. \$1.00
- D. \$0.87

164. Using the high-low method of analysis, the estimated fixed cost per month for electricity is closest to:

- A. \$53.46
- B. \$0.00
- C. \$3.40
- D. \$48.00

Calip Corporation, a merchandising company, reported the following results for October:

Sales	\$433,000
Cost of goods sold (all variable)	\$173,000
Total variable selling expense	\$18,000
Total fixed selling expense	\$9,900
Total variable administrative expense	\$10,000
Total fixed administrative expense	\$25,600

165. The gross margin for October is:

- A. \$232,000
- B. \$260,000
- C. \$397,500
- D. \$196,500

166. The contribution margin for October is:

- A. \$260,000
- B. \$232,000
- C. \$196,500
- D. \$369,500

Tolden Marketing, Inc., a merchandising company, reported sales of \$2,861,800 and cost of goods sold of \$1,492,400 for December. The company's total variable selling expense was \$77,900; its total fixed selling expense was \$70,600; its total variable administrative expense was \$98,400; and its total fixed administrative expense was \$193,400. The cost of goods sold in this company is a variable cost.

167. The contribution margin for December is:

- A. \$1,369,400
- B. \$2,421,500
- C. \$1,193,100
- D. \$929,100

168. The gross margin for December is:

- A. \$1,193,100
- B. \$929,100
- C. \$1,369,400
- D. \$2,597,800

Ence Sales, Inc., a merchandising company, reported sales of 6,400 units in April at a selling price of \$684 per unit. Cost of goods sold, which is a variable cost, was \$455 per unit. Variable selling expenses were \$30 per unit and variable administrative expenses were \$40 per unit. The total fixed selling expenses were \$156,800 and the total administrative expenses were \$260,400.

169. The contribution margin for April was:

- A. \$1,017,600
- B. \$1,465,600
- C. \$600,400
- D. \$3,512,400

170. The gross margin for April was:

- A. \$1,465,600
- B. \$3,960,400
- C. \$1,017,600
- D. \$600,400

Nieman Inc., a local retailer, has provided the following data for the month of March:

Merchandise inventory, beginning balance	\$30,000
Merchandise inventory, ending balance.....	\$34,000
Sales	\$280,000
Purchases of merchandise inventory.....	\$146,000
Selling expense	\$27,000
Administrative expense	\$64,000

171. The cost of goods sold for March was:

- A. \$146,000
- B. \$150,000
- C. \$142,000
- D. \$237,000

172. The net operating income for March was:

- A. \$130,000
- B. \$134,000
- C. \$43,000
- D. \$47,000

Searls Corporation, a merchandising company, reported the following results for July:

Number of units sold	2,700 units
Selling price per unit.....	\$664 per unit
Unit cost of goods sold	\$405 per unit
Variable selling expense per unit.....	\$48 per unit
Total fixed selling expense.....	\$56,500
Variable administrative expense per unit.....	\$13 per unit
Total fixed administrative expense	\$118,200

Cost of goods sold is a variable cost in this company.

173. The gross margin for July is:

- A. \$1,618,100
- B. \$699,300
- C. \$359,900
- D. \$534,600

174. The contribution margin for July is:

- A. \$534,600
- B. \$699,300
- C. \$359,900
- D. \$1,453,400

Dechico Corporation purchased a machine 3 years ago for \$456,000 when it launched product G92L. Unfortunately, this machine has broken down and cannot be repaired. The machine could be replaced by a new model 330 machine costing \$474,000 or by a new model 260 machine costing \$418,000. Management has decided to buy the model 260 machine. It has less capacity than the model 330 machine, but its capacity is sufficient to continue making product G92L. Management also considered, but rejected, the alternative of dropping product G92L and not replacing the old machine. If that were done, the \$418,000 invested in the new machine could instead have been invested in a project that would have returned a total of \$496,000.

175. In making the decision to buy the model 260 machine rather than the model 330 machine, the differential cost was:

- A. \$18,000
- B. \$56,000
- C. \$38,000
- D. \$40,000

176. In making the decision to buy the model 260 machine rather than the model 330 machine, the sunk cost was:

- A. \$418,000
- B. \$456,000
- C. \$474,000
- D. \$496,000

177. In making the decision to invest in the model 260 machine, the opportunity cost was:

- A. \$418,000
- B. \$456,000
- C. \$474,000
- D. \$496,000

Management of Childers Corporation is considering whether to purchase a new model 380 machine costing \$278,000 or a new model 230 machine costing \$207,000 to replace a machine that was purchased 3 years ago for \$266,000. The old machine was used to make product R16K until it broke down last week. Unfortunately, the old machine cannot be repaired. Management has decided to buy the new model 230 machine. It has less capacity than the new model 380 machine, but its capacity is sufficient to continue making product R16K. Management also considered, but rejected, the alternative of simply dropping product R16K. If that were done, instead of investing \$207,000 in the new machine, the money could be invested in a project that would return a total of \$305,000.

178. In making the decision to buy the model 230 machine rather than the model 380 machine, the sunk cost was:

- A. \$305,000
- B. \$266,000
- C. \$278,000
- D. \$207,000

179. In making the decision to buy the model 230 machine rather than the model 380 machine, the differential cost was:

- A. \$71,000
- B. \$59,000
- C. \$12,000
- D. \$39,000

180. In making the decision to invest in the model 230 machine, the opportunity cost was:

- A. \$278,000
- B. \$305,000
- C. \$207,000
- D. \$266,000

Essay Questions

181. A number of costs are listed below.

	Cost Description	Cost Object
1.	Cost of a measles vaccine administered at an outpatient clinic at a hospital	The outpatient clinic
2.	Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer.....	The auto repair shop
3.	Accounting professor's salary	A particular class
4.	Cost of electronic navigation system installed in a yacht at a yacht manufacturer	A particular yacht
5.	Cost of wiring used in making a personal computer	A particular personal computer
6.	Supervisor's wages in a computer manufacturing facility	A particular personal computer
7.	Cost of lubrication oil used at the auto repair shop of an automobile dealer	The auto repair shop
8.	Cost of heating a hotel run by a chain of hotels.....	A particular hotel guest
9.	Cost of heating a hotel run by a chain of hotels.....	The particular hotel
10.	Cost of tongue depressors used in an outpatient clinic at a hospital	A particular patient

Required:

For each item above, indicate whether the cost is direct or indirect with respect to the cost object listed next to it.

182. The Plastech Company began operations several years ago. The company's product requires materials that cost \$25 per unit. The company employs a production supervisor whose salary is \$2,000 per month. Production line workers are paid \$15 per hour to manufacture and assemble the product. The company rents the equipment needed to produce the product at a rental cost of \$1,500 per month. The building is depreciated on the straight-line basis at \$9,000 per year.

The company spends \$40,000 per year to market the product. Shipping costs for each unit are \$20 per unit.

The company plans to liquidate several investments in order to expand production. These investments currently earn a return of \$8,000 per year.

Required:

Complete the answer sheet below by placing an "X" under each heading that identifies the cost involved. The "Xs" can be placed under more than one heading for a single cost, e.g., a cost might be a sunk cost, an overhead cost, and a product cost.

	Variable Cost	Fixed Cost	Direct Materials Cost	Direct Materials Cost	Direct Labor Cost	Manufacturing Overhead Cost	Period Cost	Opportunity Cost	Sunk Cost
Materials									
Production supervisor salary									
Production line worker wages									
Equipment rental									
Building depreciation									
Marketing costs									
Shipping cost									
Return on present investments									

183. A partial listing of costs incurred at Falkenberg Corporation during October appears below:

Direct materials.....	\$195,000
Utilities, factory.....	\$9,000
Sales commissions.....	\$75,000
Administrative salaries.....	\$113,000
Indirect labor.....	\$30,000
Advertising.....	\$119,000
Depreciation of production equipment.....	\$28,000
Direct labor.....	\$105,000
Depreciation of administrative equipment.....	\$44,000

Required:

- a. What is the total amount of product cost listed above? Show your work.
- b. What is the total amount of period cost listed above? Show your work.

184. Sobota Corporation has provided the following partial listing of costs incurred during August:

Marketing salaries.....	\$49,000
Property taxes, factory	\$7,000
Administrative travel.....	\$104,000
Sales commissions	\$49,000
Indirect labor	\$38,000
Direct materials.....	\$138,000
Advertising	\$76,000
Depreciation of production equipment	\$54,000
Direct labor.....	\$89,000

Required:

- What is the total amount of product cost listed above? Show your work.
- What is the total amount of period cost listed above? Show your work.

185. Stony Electronics Corporation manufactures a portable radio designed for mounting on the wall of the bathroom. The following list represents some of the different types of costs incurred in the manufacture of these radios:

1. The plant manager's salary.
2. The cost of heating the plant.
3. The cost of heating executive offices.
4. The cost of printed circuit boards used in the radios.
5. Salaries and commissions of company salespersons.
6. Depreciation on office equipment used in the executive offices.
7. Depreciation on production equipment used in the plant.
8. Wages of janitorial personnel who clean the plant.
9. The cost of insurance on the plant building.
10. The cost of electricity to light the plant.
11. The cost of electricity to power plant equipment.
12. The cost of maintaining and repairing equipment in the plant.
13. The cost of printing promotional materials for trade shows.
14. The cost of solder used in assembling the radios.
15. The cost of telephone service for the executive offices.

Required:

Classify each of the items above as product (inventoriable) cost or period (noninventoriable) cost for the purpose of preparing external financial statements.

186. A number of costs and measures of activity are listed below.

	Cost Description	Possible Measure of Activity
1.	Cost of renting production equipment on a monthly basis at a surfboard manufacturer	Surfboards produced
2.	Cost of shipping bags of garden mulch to a retail garden store	Bags shipped
3.	Building rent at a sandwich shop	Dollar sales
4.	Cost of hard disk installed in a computer	Number of computers assembled
5.	Cost of fresh vegetables used at a sandwich shop	Dollar sales
6.	Janitorial wages at a surfboard manufacturer	Surfboards produced
7.	Cost of advertising at a surfboard company	Surfboards sold
8.	Clinical supplies at a doctor's office	Number of patients
9.	Cost of leasing checkout equipment on a monthly basis at an electronics store	Dollar sales
10.	Cost of heating an electronics store	Dollar sales

Required:

For each item above, indicate whether the cost is MAINLY fixed or variable with respect to the possible measure of activity listed next to it.

187.A number of costs and measures of activity are listed below.

	Cost Description	Possible Measure of Activity
1.	Cost of cement used to produce cinder blocks	Cinder blocks produced
2.	Cost of leasing checkout equipment on a monthly basis at a hardware store.....	Dollar sales
3.	Cost of vaccine used at a clinic.....	Vaccines administered
4.	Salary of the staff chaplain at a hospital.....	Number of patients
5.	Windshield wiper blades installed on autos at an auto assembly plant.....	Number of autos assembled
6.	Lease cost of equipment at a dentist's office.....	Number of patients
7.	Interest expense on corporate debt.....	Dollar sales
8.	Cost of renting production equipment on a monthly basis at a snowboard manufacturer	Snowboards produced
9.	Cost of advertising at a snowboard company	Snowboards sold
10.	Cook's wages at a taco shop.....	Dollar sales

Required:

For each item above, indicate whether the cost is MAINLY fixed or variable with respect to the possible measure of activity listed next to it.

188. Younger Corporation reports that at an activity level of 8,700 units, its total variable cost is \$653,109 and its total fixed cost is \$658,416.

Required:

For the activity level of 8,800 units, compute: (a) the total variable cost; (b) the total fixed cost; (c) the total cost; (d) the average variable cost per unit; (e) the average fixed cost per unit; and (f) the average total cost per unit. Assume that this activity level is within the relevant range.

189. Shaw Supply Company sells a single product and has the following average costs at a sales level of 15,000 units:

Variable cost per unit	\$2.45
Fixed cost per unit	<u>4.75</u>
Total cost per unit	<u>\$7.20</u>

Required:

Determine the following amounts at a sales level of 18,000 units:

- a. Total variable cost
- b. Total fixed cost
- c. Variable cost per unit
- d. Fixed cost per unit
- e. Total cost per unit

190. At an activity level of 8,800 units, Pember Corporation's total variable cost is \$146,520 and its total fixed cost is \$219,296.

Required:

For the activity level of 8,900 units, compute: (a) the total variable cost; (b) the total fixed cost; (c) the total cost; (d) the average variable cost per unit; (e) the average fixed cost per unit; and (f) the average total cost per unit. Assume that this activity level is within the relevant range.

191. Cosgrove, Inc., is a wholesaler that distributes a single product. The company's revenues and expenses for the last three months are given below:

**Cosgrove Company
Traditional Format Income Statement
For the Three Months Ended June 30**

	April	May	June
Sales in units.....	3,000	3,750	4,500
Sales revenue	\$420,000	\$525,000	\$630,000
Cost of goods sold	<u>168,000</u>	<u>210,000</u>	<u>252,000</u>
Gross margin.....	252,000	315,000	378,000
Selling and administrative expenses:			
Shipping expense	44,000	50,000	56,000
Advertising expense.....	70,000	70,000	70,000
Salaries and commissions.....	107,000	125,000	143,000
Insurance expense	9,000	9,000	9,000
Depreciation expense	<u>42,000</u>	<u>42,000</u>	<u>42,000</u>
Total selling and administrative expense	<u>272,000</u>	<u>296,000</u>	<u>320,000</u>
Net operating income (loss).....	<u><u>\$ (20,000)</u></u>	<u><u>\$ 19,000</u></u>	<u><u>\$ 58,000</u></u>

Required:

- a. Determine which expenses are mixed and, by use of the high-low method, separate each mixed expense into variable and fixed elements. (Use unit sales as the activity measure.) State the cost formula for each mixed expense.
- b. Compute the company's contribution margin for May.