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

**MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.**

1. Which of the following statements are true?

A factory supervisor's salary would be classified as an indirect cost with respect to a unit of product.

A direct cost is a cost that can be easily traced to the particular cost object under consideration.

A cost can be direct or indirect. The classification can change if the cost object changes.

Only statement I is true.

Statements I and II are true.

All of the statements are true.

None of the statements are true.

1. Which of the following statements are true?

Wages paid to production supervisors would be classified as manufacturing overhead.

Indirect costs, such as manufacturing overhead, are variable costs.

Selling costs are indirect costs.

Administrative costs are indirect costs.

Only statement I is true.

Statements I and III are true.

All statements are true.

None of the statements are true.

1. Which of the following statements are true?

The sum of all manufacturing costs except for direct materials and direct labor is called manufacturing overhead.

The three cost elements ordinarily included in product costs are direct materials, direct labor, and manufacturing overhead.

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

Depreciation is always considered a period cost for external financial reporting purposes in a manufacturing company.

Depreciation on equipment a company uses in its selling and administrative activities would be classified as a period cost.

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

Conversion cost is the sum of direct labor cost and manufacturing overhead cost.

Conversion cost is the same thing as manufacturing overhead.

Conversion cost equals product cost less direct materials cost.

Only statement I is true.

Statements I and III are true.

All statements are true.

None of the statements are true.

1. Which of the following statements are true?

In a manufacturing company, all costs are period costs.

Selling and administrative expenses are period costs under generally accepted accounting principles.

The cost of shipping parts from a supplier is considered a period cost.

Only statement I is true.

Only statement II is true.

Statements I and II are true.

Statements I and III are true.

1. Which of the following statements are true?

Advertising is not a considered a product cost even if it promotes a specific product.

Product costs are also known as inventoriable costs.

Prime cost is the sum of direct materials cost and direct labor cost.

Prime cost equals manufacturing overhead cost.

Only statement I is true.

Both statements I and IV are true.

Statements I, II, and III are true.

None of the statements are true.

1. Which of the following statements are true?

If the activity level increases, then one would expect the fixed cost per unit to increase as well.

A fixed cost is a cost whose cost per unit varies as the activity level rises and falls.

A decrease in production will ordinarily result in a decrease in fixed production costs per unit.

Only statement II is true.

Only statement III is true.

Statements I and II are true.

Statements I and III are true.

1. Which of the following statements are true?

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

As activity decreases within the relevant range, fixed costs remain constant on a per unit basis.

In account analysis, an account is classified as either variable or fixed based on an analyst’s prior knowledge of how the cost in the account behaves.

Only statement I is true.

Only statement II is true.

Only statement III is true.

All statements are true.

1. Which of the following statements are true?

The variable cost per unit depends on how many units are produced.

A step-variable cost is a cost that is obtained in large chunks and that increases or decreases only in response to fairly wide changes in activity.

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

A fixed cost is constant if expressed on a per unit basis but the total dollar amount changes as the number of units increases or decreases.

Fixed costs expressed on a per unit basis do not change with changes in activity.

Committed fixed costs remain largely unchanged in the short run.

Only statement I is true.

Only statement II is true.

Only statement III is true.

All statements are true.

1. Which of the following statements are true?

Within the relevant range, a change in activity results in a change in variable cost per unit and total fixed cost.

The concept of the relevant range does not apply to variable costs.

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

When operations are interrupted or cut back, committed fixed costs are cut in the short term because the costs of restoring them later are likely to be far less than the short-run savings that are realized.

The cost of napkins put on each person's tray at a fast food restaurant is a variable cost with respect to how many persons are served.

Committed fixed costs represent organizational investments with a one-year planning horizon.

The following costs are all examples of committed fixed costs: depreciation on buildings, salaries of highly trained engineers, real estate taxes, and insurance expenses.

Only statement III is true.

Both statement I and II are true.

Both statement II and IV are true.

All statements are true.

1. Which of the following statements are true?

A fixed cost fluctuates in total as activity changes but remains constant on a per unit basis over the relevant range.

The relevant range is the range of activity within which the assumption that cost behavior is strictly linear is reasonably valid.

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

Variable costs per unit are not affected by changes in activity.

The relevant range concept is applicable to mixed costs.

A variable cost remains constant if expressed on a unit basis.

A fixed cost is not constant per unit of product.

Only statement III is true.

Both statement I and II are true.

Both statement II and IV are true.

All statements are true.

1. Which of the following statements are true?

Differential costs can only be variable.

The potential benefit that is given up when one alternative is selected over another is called a sunk cost.

The amount that a manufacturing company could earn by renting unused portions of its warehouse is an example of an opportunity cost.

Only statement I is true.

Only statement II is true.

Only statement III is true.

All statements are true.

1. Which of the following statements are true?

Opportunity costs at a manufacturing company are not part of manufacturing overhead.

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

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

In a traditional format income statement, the gross margin is sales minus cost of goods sold.

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

Only statement I is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

1. Which of the following statements are true?

In a traditional format income statement for a merchandising company, cost of goods sold is a variable cost that is included in the "Variable expenses" portion of the income statement.

Traditional format income statements are widely used for preparing external financial statements.

Although the traditional format income statement is useful for external reporting purposes, it has serious limitations when used for internal purposes because it does not distinguish between fixed and variable costs.

Only statement I is true.

Only statement II is true.

Both statements I and III are true.

Both statements II and III are true.

1. Which of the following statements are true?

In a contribution format income statement for a merchandising company, the cost of goods sold reports the product costs attached to the merchandise sold during the period.

Contribution format income statements are prepared primarily for external reporting purposes.

Most companies use the contribution approach in preparing financial statements for external reporting purposes.

Only statement I is true.

Both statements I and III are true.

All of the statements are true.

None of the statements are true.

1. Which of the following statements are true?

Contribution margin and gross margin mean the same thing.

The contribution format income statement is used as an internal planning and decision-making tool. Its emphasis on cost behavior aids cost-volume-profit analysis, management performance appraisals, and budgeting.

A contribution format income statement separates costs into fixed and variable categories, first deducting variable expenses from sales to obtain the contribution margin.

Only statement I is true.

Both statements II and III are true.

All of the statements are true.

None of the statements are true.

1. Which of the following statements concerning direct and indirect costs is NOT true?

Whether a particular cost is classified as direct or indirect does not depend on the cost object.

A direct cost is one that can be easily traced to the particular cost object.

The factory manager’s salary would be classified as an indirect cost of producing one unit of product.

A particular cost may be direct or indirect, depending on the cost object.

1. Direct costs:

are incurred to benefit a particular accounting period.

are incurred due to a specific decision.

can be easily traced to a particular cost object.

are the variable costs of producing a product.

1. Which of the following would most likely NOT be included as manufacturing overhead in a furniture factory?

The cost of the glue in a chair.

The amount paid to the individual who stains a chair.

The workman’s compensation insurance of the supervisor who oversees production.

The factory utilities of the department in which production takes place.

1. Rotonga Manufacturing Company leases a vehicle to deliver its finished products to customers. Which of the following terms correctly describes the monthly lease payments made on the delivery vehicle?

|  |  |  |
| --- | --- | --- |
|  | **Direct Cost** | **Fixed Cost** |
| **A)** | Yes | Yes |
| **B)** | Yes | No |
| **C)** | No | Yes |
| **D)** | No | No |

Choice A

Choice B

Choice C

Choice D

1. The costs of direct materials are classified as:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Conversion cost** | **Manufacturing cost** | **Prime cost** |
| **A)** | Yes | Yes | Yes |
| **B)** | No | No | No |
| **C)** | Yes | Yes | No |
| **D)** | No | Yes | Yes |

Choice A

Choice B

Choice C

Choice D

1. Manufacturing overhead includes:

all direct material, direct labor and administrative costs.

all manufacturing costs except direct labor.

all manufacturing costs except direct labor and direct materials.

all selling and administrative costs.

1. Materials used in a factory that are not an integral part of the final product, such as cleaning supplies, should be classified as:

direct materials.

a period cost.

administrative expense.

manufacturing overhead.

1. The salary paid to the president of a company would be classified on the income statement as a(n):

administrative expense.

direct labor cost.

manufacturing overhead cost.

selling expense.

1. Which of the following is NOT a period cost?

Depreciation of factory maintenance equipment.

Salary of a clerk who handles customer billing.

Insurance on a company showroom where customers can view new products.

Cost of a seminar concerning tax law updates that was attended by the company’s controller.

1. The cost of electricity for running production equipment is classified as:

|  |  |  |
| --- | --- | --- |
|  | **Conversion cost** | **Period cost** |
| **A)** | Yes | No |
| **B)** | Yes | Yes |
| **C)** | No | Yes |
| **D)** | No | No |

Choice A

Choice B

Choice C

Choice D

1. The cost of lubricants used to grease a production machine in a manufacturing company is an example of a(n):

period cost.

direct material cost.

indirect material cost.

opportunity cost.

1. Wages paid to the supervisor of the warehouse where raw materials and parts are temporarily stored before being used in production is considered an example of:

|  |  |  |
| --- | --- | --- |
|  | **Direct Labor** | **Period Cost** |
| **A)** | Yes | Yes |
| **B)** | Yes | No |
| **C)** | No | Yes |
| **D)** | No | No |

Choice A

Choice B

Choice C

Choice D

1. A factory supervisor’s wages are classified as:

|  |  |  |
| --- | --- | --- |
|  | **Indirect labor** | **Fixed manufacturing overhead** |
| **A)** | No | No |
| **B)** | Yes | Yes |
| **C)** | Yes | No |
| **D)** | No | Yes |

Choice A

Choice B

Choice C

Choice D

1. Product costs that have become expenses can be found in:

period costs.

selling expenses.

cost of goods sold.

administrative expenses.

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

|  |  |  |
| --- | --- | --- |
|  | **Conversion cost** | **Prime cost** |
| **A)** | No | No |
| **B)** | Yes | No |
| **C)** | No | Yes |
| **D)** | Yes | Yes |

Choice A

Choice B

Choice C

Choice D

1. Which of the following costs is classified as both a prime cost and a conversion cost?

Direct materials.

Direct labor.

Variable overhead.

Fixed overhead.

1. Which of the following is an example of a period cost in a company that makes clothing?

Fabric used to produce men’s pants.

Advertising cost for a new line of clothing.

Factory supervisor’s salary.

Monthly depreciation on production equipment.

1. All of the following are examples of product costs except:

depreciation on the company’s retail outlets.

salary of the plant manager.

insurance on the factory equipment.

rental costs of factory equipment.

1. Which of the following statements about product costs is true?

Product costs are deducted from revenue when the production process is completed.

Product costs are deducted from revenue as expenditures are made.

Product costs associated with unsold finished goods and work in process appear on the balance sheet as assets.

Product costs appear on financial statements only when products are sold.

1. Which of the following statements is correct in describing manufacturing overhead?

Manufacturing overhead when combined with direct materials cost forms conversion cost.

Manufacturing overhead consists of all manufacturing cost except for prime cost.

Manufacturing overhead is a period cost.

Manufacturing overhead when combined with direct labor cost forms prime cost.

1. Direct labor cost is classified as:

|  |  |  |
| --- | --- | --- |
|  | **Conversion cost** | **Prime Cost** |
| **A)** | Yes | Yes |
| **B)** | No | No |
| **C)** | No | Yes |
| **D)** | Yes | No |

Choice A

Choice B

Choice C

Choice D

1. The fixed portion of the cost of electricity for a manufacturing facility is classified as a:

|  |  |  |
| --- | --- | --- |
|  | **Period cost** | **Product Cost** |
| **A)** | Yes | Yes |
| **B)** | No | No |
| **C)** | No | Yes |
| **D)** | Yes | No |

Choice A

Choice B

Choice C

Choice D

1. Prime cost consists of:

direct labor and manufacturing overhead.

direct materials and manufacturing overhead.

direct materials and direct labor.

direct materials, direct labor and manufacturing overhead.

1. Depreciation on a personal computer used in the marketing department of a manufacturing company would be classified as:

a product cost that is fixed with respect to the company’s output.

a period cost that is fixed with respect to the company’s output.

a product cost that is variable with respect to the company’s output.

a period cost that is variable with respect to the company’s output.

1. Property taxes on a company’s factory building would be classified as a(n):

product cost.

opportunity cost.

period cost.

variable cost.

1. Factory overhead is typically a(n):

mixed cost.

fixed cost.

variable cost.

irrelevant cost.

1. As the level of activity increases, how will a mixed cost in total and per unit behave?

|  |  |  |
| --- | --- | --- |
|  | **In Total** | **Per Unit** |
| **A)** | Increase | Decrease |
| **B)** | Increase | Increase |
| **C)** | Increase | No effect |
| **D)** | Decrease | Increase |
| **E)** | Decrease | No effect |

Choice A

Choice B

Choice C

Choice D

Choice E

1. The following data have been collected for four different cost items.

|  |  |  |
| --- | --- | --- |
| **Cost Item** | **Cost at 100 units** | **Cost at 140 units** |
| **W** | $8,000 | $10,560 |
| **X** | $5,000 | $ 5,000 |
| **Y** | $6,500 | $ 9,100 |
| **Z** | $6,700 | $ 8,580 |

Which of the following classifications of these cost items by cost behavior is correct?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Cost W** | **Cost X** | **Cost Y** | **Cost Z** |
| **A)** | variable | fixed | mixed | variable |
| **B)** | mixed | fixed | variable | mixed |
| **C)** | variable | fixed | variable | variable |
| **D)** | mixed | fixed | mixed | mixed |

Choice A

Choice B

Choice C

Choice D

1. Within the relevant range, variable costs can be expected to:

vary in total in direct proportion to changes in the activity level.

remain constant in total as the activity level changes.

increase on a per unit basis as the activity level increases.

increase on a per unit basis as the activity level decreases.

1. The relative proportion of variable, fixed, and mixed costs in a company is known as the company’s:

contribution margin.

cost structure.

product mix.

relevant range.

1. An example of a committed fixed cost is:

management training seminars.

a long-term equipment lease.

research and development.

advertising.

1. For the past 8 months, Jinan Corporation has experienced a steady increase in its cost per unit even though total costs have remained stable. This cost per unit increase may be due to\_\_\_\_\_\_\_\_\_\_\_\_\_ costs if the level of activity at Jinan is\_\_\_\_\_\_\_\_\_\_\_\_\_.

fixed, decreasing

fixed, increasing

variable, decreasing

variable, increasing

1. Which of the following statements is true when referring to fixed costs?

Committed fixed costs arise from the annual decisions by management.

As volume increases, unit fixed cost and total fixed cost will change.

Fixed costs increase in total throughout the relevant range.

Discretionary fixed costs can often be reduced to zero for short periods of time without seriously impairing the long-run goals of the company.

1. Which costs will change with a decrease in activity within the relevant range?

Total fixed costs and total variable cost.

Unit fixed costs and total variable cost.

Unit variable cost and unit fixed cost.

Unit fixed cost and total fixed cost.

1. Which of the following is correct concerning reactions to INCREASES in activity?

|  |  |  |
| --- | --- | --- |
|  | **Total Variable Cost** | **Variable Cost Per Unit** |
| **A)** | Increases | Decreases |
| **B)** | Constant | Decreases |
| **C)** | Decreases | Constant |
| **D)** | Increases | Constant |

Choice A

Choice B

Choice C

Choice D

1. For an automobile manufacturer, the cost of a driver’s side air bag purchased from a supplier and installed in every automobile would best be described as a:

fixed cost.

mixed cost.

step-variable cost.

variable cost.

1. Fixed costs expressed on a per unit basis:

increase with increases in activity.

decrease with increases in activity.

are not affected by activity.

should be ignored in making decisions since they cannot change.

1. Within the relevant range, a difference between variable costs and fixed costs is:

variable costs per unit fluctuate and fixed costs per unit remain constant.

variable costs per unit are constant and fixed costs per unit fluctuate.

both total variable costs and total fixed costs are constant.

both total variable costs and total fixed costs fluctuate.

1. A merchandising company typically will have a high proportion of which type of cost in its cost structure?

Variable.

Fixed.

Mixed.

Step-variable.

1. When the level of activity decreases within the relevant range, the fixed cost per unit will:

decrease.

increase.

remain the same.

The effect cannot be predicted.

1. Which of the following production costs, if expressed on a per unit basis, would be most likely to change significantly as the production level varies?

Direct materials.

Direct labor.

Fixed manufacturing overhead.

Variable costs.

1. In the standard cost formula Y = a + bX, what does the "Y" represent?

total cost

total fixed cost

total variable cost

variable cost per unit

1. An example of a committed fixed cost would be:

taxes on real estate.

management development programs.

public relations costs.

advertising programs.

1. In the standard cost formula Y = a + bX, what does the "X" represent?

total cost

total fixed cost

the level of activity

variable cost per unit

1. One full-time clerical worker is needed for every 750 accounts receivable. The total wages of the accounts receivable clerks is an example of a:

fixed cost.

step-variable cost.

mixed cost.

curvilinear cost.

1. Which of the following is unlikely to be classified as a fixed cost with respect to the number of units produced and sold?

Property taxes on a headquarters building.

Legal department salaries.

Cost of leasing the company’s mainframe computer.

Production supplies.

1. Which of the following costs could contain both variable and fixed cost elements with respect to the total output of the company?

Sales commissions.

Manufacturing overhead.

Direct materials.

Administrative salaries.

1. A cost incurred in the past that is not relevant to any current decision is classified as a(n):

period cost.

opportunity cost.

sunk cost.

differential cost.

1. The term that refers to costs incurred in the past that are not relevant to a decision is:

marginal cost.

indirect cost.

period cost.

sunk cost.

1. Differential costs can:

only be fixed costs.

only be variable costs.

be either fixed or variable.

be sunk costs.

1. All of the following can be differential costs except:

variable costs.

sunk costs.

opportunity costs.

fixed costs.

1. Contribution margin is:

Sales less cost of goods sold.

Sales less variable production, variable selling, and variable administrative expenses.

Sales less variable production expense.

Sales less all variable and fixed expenses.

1. Which of the following approaches to preparing an income statement includes a calculation of the gross margin?

|  |  |  |
| --- | --- | --- |
|  | **Traditional**  **Approach** | **Contribution**  **Approach** |
| **A)** | Yes | Yes |
| **B)** | Yes | No |
| **C)** | No | Yes |
| **D)** | No | No |

Choice A

Choice B

Choice C

Choice D

1. Meginnis Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $5.20 |
| **Direct labor** | $3.75 |
| **Variable manufacturing overhead** | $1.65 |
| **Fixed manufacturing overhead** | $2.60 |
| **Fixed selling expense** | $0.50 |
| **Fixed administrative expense** | $0.40 |
| **Sales commissions** | $1.50 |
| **Variable administrative expense** | $0.50 |

If 6,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$79,200

$63,600

$62,700

$53,700

1. Perkey Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.00 |  |
| **Direct labor** | $ 2.90 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $21,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 7,500 |

If 4,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$53,400

$35,600

$36,600

$31,600

1. Norred Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.70 |  |
| **Variable manufacturing overhead** | $ 1.60 |  |
| **Fixed manufacturing overhead** |  | $121,500 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 44,550 |

If 8,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$120,800

$134,300

$12,800

$121,500

1. Ouelette Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $5.25 |
| **Direct labor** | $4.05 |
| **Variable manufacturing overhead** | $1.30 |
| **Fixed manufacturing overhead** | $3.00 |
| **Fixed selling expense** | $0.70 |
| **Fixed administrative expense** | $0.40 |
| **Sales commissions** | $0.50 |
| **Variable administrative expense** | $0.45 |

If 6,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$15,000

$22,800

$7,800

$25,800

1. The following costs were incurred in May:

|  |  |
| --- | --- |
| **Direct materials** | $47,900 |
| **Direct labor** | $36,000 |
| **Manufacturing overhead** | $30,200 |
| **Selling expenses** | $20,800 |
| **Administrative expenses** | $32,300 |

Conversion costs during the month totaled:

$66,200

$78,100

$167,200

$83,900

1. The following costs were incurred in May:

|  |  |
| --- | --- |
| **Direct materials** | $41,000 |
| **Direct labor** | $13,000 |
| **Manufacturing overhead** | $46,000 |
| **Selling expenses** | $18,000 |
| **Administrative expenses** | $15,000 |

Conversion costs during the month totaled:

$54,000

$133,000

$59,000

$87,000

1. Abburi Company's manufacturing overhead is 40% of its total conversion costs. If direct labor is $67,200 and if direct materials are $23,600, the manufacturing overhead is:

$44,800

$100,800

$15,733

$60,533

1. Abburi Company's manufacturing overhead is 60% of its total conversion costs. If direct labor is $52,000 and if direct materials are $28,000, the manufacturing overhead is:

$34,667

$78,000

$42,000

$120,000

1. During the month of May, direct labor cost totaled $13,360 and direct labor cost was 40% of prime cost. If total manufacturing costs during May were $74,200, the manufacturing overhead was:

$20,040

$33,400

$60,840

$40,800

1. During the month of May, direct labor cost totaled $10,000 and direct labor cost was 40% of prime cost. If total manufacturing costs during May were $86,000, the manufacturing overhead was:

$76,000

$25,000

$61,000

$15,000

1. In May direct labor was 45% of conversion cost. If the manufacturing overhead for the month was $73,700 and the direct materials cost was $25,200, the direct labor cost was:

$90,078

$60,300

$30,800

$20,618

1. In May direct labor was 60% of conversion cost. If the manufacturing overhead for the month was $54,000 and the direct materials cost was $30,000, the direct labor cost was:

$36,000

$20,000

$81,000

$45,000

1. The following costs were incurred in May:

|  |  |
| --- | --- |
| **Direct materials** | $41,000 |
| **Direct labor** | $29,900 |
| **Manufacturing overhead** | $21,900 |
| **Selling expenses** | $14,900 |
| **Administrative expenses** | $30,400 |

Prime costs during the month totaled:

$92,800

$138,100

$70,900

$51,800

1. The following costs were incurred in May:

|  |  |
| --- | --- |
| **Direct materials** | $33,000 |
| **Direct labor** | $13,000 |
| **Manufacturing overhead** | $23,000 |
| **Selling expenses** | $16,000 |
| **Administrative expenses** | $34,000 |

Prime costs during the month totaled:

$36,000

$119,000

$69,000

$46,000

1. Kneeland Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $6.80 |  |
| **Direct labor** | $4.15 |  |
| **Variable manufacturing overhead** | $1.65 |  |
| **Fixed manufacturing overhead** |  | $121,500 |
| **Sales commissions** | $1.00 |  |
| **Variable administrative expense** | $0.50 |  |
| **Fixed selling and administrative expense** |  | $ 40,500 |

If 10,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$186,000

$138,000

$162,000

$150,000

1. Perteet Corporation's relevant range of activity is 8,100 units to 15,500 units. When it produces and sells 11,800 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $7.70 |
| **Direct labor** | $3.95 |
| **Variable manufacturing overhead** | $1.70 |
| **Fixed manufacturing overhead** | $3.40 |
| **Fixed selling expense** | $0.65 |
| **Fixed administrative expense** | $0.35 |
| **Sales commissions** | $0.45 |
| **Variable administrative expense** | $0.50 |

If 9,400 units are produced, the total amount of manufacturing overhead cost is closest to:

$37,740

$69,350

$56,100

$29,970

1. Perteet Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $6.70 |
| **Direct labor** | $3.25 |
| **Variable manufacturing overhead** | $1.60 |
| **Fixed manufacturing overhead** | $3.00 |
| **Fixed selling expense** | $0.70 |
| **Fixed administrative expense** | $0.40 |
| **Sales commissions** | $0.50 |
| **Variable administrative expense** | $0.55 |

If 4,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$18,100

$28,000

$21,400

$14,800

1. A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is $3,090 and is paid at the beginning of the first year. Ninety percent of the premium applies to manufacturing operations and ten 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)** | $ 103 | $ 927 |
| **B)** | $ 1,030 | $ 0 |
| **C)** | $ 0 | $ 1,030 |
| **D)** | $ 927 | $ 103 |

Choice A

Choice B

Choice C

Choice D

1. A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is $2,100 and is paid at the beginning of the first year. Sixty percent of the premium applies to manufacturing operations and forty 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)** | $ 280 | $ 420 |
| **B)** | $ 420 | $ 280 |
| **C)** | $ 700 | $ 0 |
| **D)** | $ 0 | $ 700 |

Choice A

Choice B

Choice C

Choice D

1. Shelp Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.15 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.40 |  |
| **Fixed manufacturing overhead** |  | $ 81,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 40,500 |

For financial reporting purposes, the total amount of period costs incurred to sell 9,000 units is closest to:

$33,000

$9,000

$40,500

$49,500

1. Phaup Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 4.85 |
| **Direct labor** | $ 4.00 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Fixed manufacturing overhead** | $ 3.90 |
| **Fixed selling expense** | $ 0.90 |
| **Fixed administrative expense** | $ 0.60 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |
|  |

For financial reporting purposes, the total amount of period costs incurred to sell 5,000 units is closest to:

$8,200

$12,250

$7,500

$4,750

1. Bressette Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.70 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 10,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 5,000 |

For financial reporting purposes, the total amount of product costs incurred to make 5,000 units is closest to:

$55,750

$65,750

$10,000

$70,750

1. Landmann Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.35 |
| **Direct labor** | $ 4.10 |
| **Variable manufacturing overhead** | $ 1.35 |
| **Fixed manufacturing overhead** | $ 13.50 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.45 |

For financial reporting purposes, the total amount of product costs incurred to make 9,000 units is closest to:

$106,200

$236,700

$121,500

$227,700

1. Timchak Corporation reports that at an activity level of 9,900 units, its total variable cost is $919,116 and its total fixed cost is $259,974. What would be the total cost, both fixed and variable, at an activity level of 10,100 units? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$1,197,658

$1,191,000

$1,179,090

$1,202,910

1. Wofril Corporation uses the cost formula Y = $5,300 + $0.60X for the maintenance cost, where X is machine-hours. The August budget is based on 8,000 hours of planned machine time. Maintenance cost expected to be incurred during August is:

$10,100

$4,800

$500

$5,300

1. At an activity level of 8,400 machine-hours in a month, Falks Corporation’s total variable production engineering cost is $732,480 and its total fixed production engineering cost is $180,400. What would be the total production engineering cost per machine-hour, both fixed and variable, at an activity level of 8,800 machine-hours in a month? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$103.74

$108.68

$107.70

$104.04

1. At an activity level of 7,200 machine-hours in a month, Falks Corporation’s total variable production engineering cost is $556,416 and its total fixed production engineering cost is $226,008. What would be the total production engineering cost per machine-hour, both fixed and variable, at an activity level of 7,300 machine-hours in a month? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$107.93

$107.18

$108.67

$108.24

1. Mullennex Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.55 |
| **Direct labor** | $ 3.50 |
| **Variable manufacturing overhead** | $ 1.25 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are produced, the average fixed manufacturing cost per unit produced is closest to:

$2.40

$2.70

$3.00

$3.75

1. Brault Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.85 |  |
| **Direct labor** | $ 3.85 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 97,200 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 40,500 |

If 10,000 units are sold, the variable cost per unit sold is closest to:

$22.75

$11.95

$13.50

$28.80

1. Given the cost formula, Y = $16,000 + $3.40X, total cost for an activity level of 4,000 units would be:

$13,600

$3,600

$29,600

$16,000

1. Sparacino Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.90 |  |
| **Direct labor** | $ 3.90 |  |
| **Variable manufacturing overhead** | $ 1.70 |  |
| **Fixed manufacturing overhead** |  | $ 25,200 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 8,100 |

If 5,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$24,750

$42,650

$33,700

$29,225

1. Given the cost formula Y = $23,000 + $8X, total cost at an activity level of 7,000 units would be:

$33,000

$79,000

$23,000

$56,000

1. At an activity level of 8,400 units in a month, Braughton Corporation’s total variable maintenance and repair cost is $697,284 and its total fixed maintenance and repair cost is $464,100. What would be the total maintenance and repair cost, both fixed and variable, at an activity level of 8,500 units in a month? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$1,175,210

$1,169,685

$1,161,384

$1,168,297

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

|  |  |  |
| --- | --- | --- |
|  | **June** | **July** |
| **Activity level in units** | 10,000 | 11,000 |
| **Direct materials** | $ 17,000 | $ ? |
| **Fixed factory rent** | 21,000 | ? |
| **Other production costs** | 20,000 | ? |
| **Total cost** | $ 58,000 | $ 61,300 |

Assuming that these activity levels are within the relevant range, the other production costs for July were:  
**Note: Round intermediate calculations to 2 decimal places.**

$21,600

$20,000

$22,000

$19,500

1. Paolucci Corporation's relevant range of activity is 3,900 units to 9,500 units. When it produces and sells 6,700 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.35 |
| **Direct labor** | $ 3.25 |
| **Variable manufacturing overhead** | $ 1.25 |
| **Fixed manufacturing overhead** | $ 3.50 |
| **Fixed selling expense** | $ 1.20 |
| **Fixed administrative expense** | $ 0.75 |
| **Sales commissions** | $ 1.15 |
| **Variable administrative expense** | $ 0.65 |

If 5,700 units are sold, the variable cost per unit sold is closest to:

$18.10

$10.85

$14.35

$12.65

1. Paolucci Corporation's relevant range of activity is 4,000 units to 8,000 units. When it produces and sells 6,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.45 |
| **Direct labor** | $ 3.30 |
| **Variable manufacturing overhead** | $ 1.25 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 1.05 |
| **Fixed administrative expense** | $ 0.60 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If 5,000 units are sold, the variable cost per unit sold is closest to:

$17.15

$11.00

$14.00

$12.50

1. Schonhardt Corporation's relevant range of activity is 4,000 units to 5,500 units. When it produces and sells 4,750 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 8.00 |
| **Direct labor** | $ 3.70 |
| **Variable manufacturing overhead** | $ 2.05 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 1.35 |
| **Fixed administrative expense** | $ 1.05 |
| **Sales commissions** | $ 1.15 |
| **Variable administrative expense** | $ 1.05 |

If 4,500 units are produced, the total amount of fixed manufacturing cost incurred is closest to:

$27,550

$20,663

$19,238

$14,250

1. Schonhardt Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 7.15 |
| **Direct labor** | $ 3.40 |
| **Variable manufacturing overhead** | $ 1.35 |
| **Fixed manufacturing overhead** | $ 2.80 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are produced, the total amount of fixed manufacturing cost incurred is closest to:

$16,800

$14,000

$12,600

$11,200

1. At a volume of 5,000 units, Pwerson Company incurred $32,000 in factory overhead costs, including $14,000 in fixed costs. If volume increases to 6,000 units and both 5,000 units and 6,000 units are within the relevant range, then the company would expect to incur total factory overhead costs of:  
   **Note: Round intermediate calculations to 2 decimal places.**

$35,600

$21,600

$32,000

$18,000

1. Waldhauser Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.10 |
| **Direct labor** | $ 3.45 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Fixed manufacturing overhead** | $ 3.30 |
| **Fixed selling expense** | $ 0.75 |
| **Fixed administrative expense** | $ 0.60 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

If 6,000 units are sold, the total variable cost is closest to:

$79,500

$107,400

$67,800

$87,600

1. Comparative income statements for Boggs Sports Equipment Company for the last two months are presented below:

|  |  |  |
| --- | --- | --- |
|  | **July** | **August** |
| **Sales in units** | 11,000 | 10,000 |
| **Sales** | $ 165,000 | $ 150,000 |
| **Cost of goods sold** | 72,600 | 66,000 |
| **Gross margin** | 92,400 | 84,000 |
| **Selling and administrative expenses:** |  |  |
| **Rent** | $ 12,000 | $ 12,000 |
| **Sales commissions** | $ 13,200 | $ 12,000 |
| **Maintenance expenses** | $ 13,500 | $ 13,000 |
| **Clerical expense** | $ 16,000 | $ 15,000 |
| **Total selling and administrative expenses** | $ 54,700 | $ 52,000 |
| **Net operating income** | $ 37,700 | $ 32,000 |

All of the company's costs are either fixed, variable, or a mixture of the two (that is, mixed). Assume that the relevant range includes all of the activity levels mentioned in this problem.  
Which of the selling and administrative expenses of the company is variable?

Rent

Sales Commissions

Maintenance Expense

Clerical Expense

1. Tirri Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.65 |  |
| **Direct labor** | $ 3.40 |  |
| **Variable manufacturing overhead** | $ 1.15 |  |
| **Fixed manufacturing overhead** |  | $ 22,700 |
| **Sales commissions** | $ 1.10 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 7,100 |

If the selling price is $26.40 per unit, the contribution margin per unit sold is closest to:

$13.65

$6.15

$16.35

$9.30

1. Tirri Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.85 |  |
| **Direct labor** | $ 3.90 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 22,500 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 7,500 |

If the selling price is $26.20 per unit, the contribution margin per unit sold is closest to:

$12.65

$6.65

$15.45

$9.70

1. Macy Corporation's relevant range of activity is 4,800 units to 11,000 units. When it produces and sells 7,900 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 4.95 |
| **Direct labor** | $ 3.40 |
| **Variable manufacturing overhead** | $ 1.40 |
| **Fixed manufacturing overhead** | $ 3.60 |
| **Fixed selling expense** | $ 1.35 |
| **Fixed administrative expense** | $ 0.90 |
| **Sales commissions** | $ 1.30 |
| **Variable administrative expense** | $ 0.80 |

If the selling price is $26.50 per unit, the contribution margin per unit sold is closest to:

$9.75

$7.10

$18.15

$14.65

1. Macy Corporation's relevant range of activity is 4,000 units to 8,000 units. When it produces and sells 6,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 4.95 |
| **Direct labor** | $ 3.25 |
| **Variable manufacturing overhead** | $ 1.45 |
| **Fixed manufacturing overhead** | $ 4.20 |
| **Fixed selling expense** | $ 1.05 |
| **Fixed administrative expense** | $ 0.60 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If the selling price is $23.50 per unit, the contribution margin per unit sold is closest to:

$9.65

$6.50

$15.30

$12.35

1. Bellucci Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.35 |  |
| **Direct labor** | $ 3.55 |  |
| **Variable manufacturing overhead** | $ 1.40 |  |
| **Fixed manufacturing overhead** |  | $ 110,500 |
| **Sales commissions** | $ 1.15 |  |
| **Variable administrative expense** | $ 0.70 |  |
| **Fixed selling and administrative expense** |  | $ 41,225 |

The incremental manufacturing cost that the company will incur if it increases production from 8,500 to 8,501 units is closest to (assume that the increase is within the relevant range):

$27.40

$12.30

$32.00

$25.30

1. Bellucci Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.10 |  |
| **Direct labor** | $ 3.95 |  |
| **Variable manufacturing overhead** | $ 1.75 |  |
| **Fixed manufacturing overhead** |  | $ 105,300 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 36,450 |

The incremental manufacturing cost that the company will incur if it increases production from 9,000 to 9,001 units is closest to (assume that the increase is within the relevant range):

$26.75

$12.80

$30.05

$24.50

1. Fiori Corporation's relevant range of activity is 2,900 units to 8,500 units. When it produces and sells 5,700 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.20 |
| **Direct labor** | $ 3.30 |
| **Variable manufacturing overhead** | $ 1.90 |
| **Fixed manufacturing overhead** | $ 3.50 |
| **Fixed selling expense** | $ 0.65 |
| **Fixed administrative expense** | $ 0.55 |
| **Sales commissions** | $ 1.30 |
| **Variable administrative expense** | $ 0.80 |

The incremental manufacturing cost that the company will incur if it increases production from 7,500 to 7,501 units is closest to:

$18.20

$11.40

$14.90

$15.55

1. Fiori Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.05 |
| **Direct labor** | $ 3.05 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

The incremental manufacturing cost that the company will incur if it increases production from 5,000 to 5,001 units is closest to:

$16.20

$10.80

$13.80

$14.30

1. Haack Incorporated is a merchandising company. Last month the company's cost of goods sold was $69,800. The company's beginning merchandise inventory was $12,900 and its ending merchandise inventory was $22,800. What was the total amount of the company's merchandise purchases for the month?

$69,800

$59,900

$79,700

$105,500

1. Haack Incorporated is a merchandising company. Last month the company's cost of goods sold was $84,000. The company's beginning merchandise inventory was $20,000 and its ending merchandise inventory was $18,000. What was the total amount of the company's merchandise purchases for the month?

$86,000

$82,000

$84,000

$122,000

1. Gabel Incorporated is a merchandising company. Last month the company's merchandise purchases totaled $63,000. The company's beginning merchandise inventory was $13,000 and its ending merchandise inventory was $15,000. What was the company's cost of goods sold for the month?

$91,000

$63,000

$65,000

$61,000

1. The following cost data pertain to the operations of Quinonez Department Stores, Incorporated, for the month of September.

|  |  |
| --- | --- |
| **Corporate headquarters building lease** | $ 79,700 |
| **Cosmetics Department sales commissions-Northridge Store** | $ 5,180 |
| **Corporate legal office salaries** | $ 61,600 |
| **Store manager's salary-Northridge Store** | $ 16,900 |
| **Heating-Northridge Store** | $ 16,800 |
| **Cosmetics Department cost of sales-Northridge Store** | $ 33,500 |
| **Central warehouse lease cost** | $ 7,400 |
| **Store security-Northridge Store** | $ 14,200 |
| **Cosmetics Department manager's salary-Northridge Store** | $ 4,080 |

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

$90,660

$42,760

$38,680

$33,500

1. The following cost data pertain to the operations of Quinonez Department Stores, Incorporated, for the month of September.

|  |  |
| --- | --- |
| **Corporate headquarters building lease** | $ 77,000 |
| **Cosmetics Department sales commissions-Northridge Store** | $ 4,000 |
| **Corporate legal office salaries** | $ 59,000 |
| **Store manager's salary-Northridge Store** | $ 11,000 |
| **Heating-Northridge Store** | $ 10,000 |
| **Cosmetics Department cost of sales-Northridge Store** | $ 37,000 |
| **Central warehouse lease cost** | $ 16,000 |
| **Store security-Northridge Store** | $ 12,000 |
| **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.  
What is the total amount of the costs listed above that are direct costs of the Cosmetics Department?

$78,000

$45,000

$41,000

$37,000

1. The following cost data pertain to the operations of Quinonez Department Stores, Incorporated, for the month of September.

|  |  |
| --- | --- |
| **Corporate headquarters building lease** | $ 78,200 |
| **Cosmetics Department sales commissions-Northridge Store** | $ 5,830 |
| **Corporate legal office salaries** | $ 58,200 |
| **Store manager's salary-Northridge Store** | $ 19,600 |
| **Heating-Northridge Store** | $ 19,200 |
| **Cosmetics Department cost of sales-Northridge Store** | $ 40,800 |
| **Central warehouse lease cost** | $ 12,300 |
| **Store security-Northridge Store** | $ 14,800 |
| **Cosmetics Department manager's salary-Northridge Store** | $ 4,240 |

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

$148,700

$53,600

$50,870

$78,200

1. The following cost data pertain to the operations of Quinonez Department Stores, Incorporated, for the month of September.

|  |  |
| --- | --- |
| **Corporate headquarters building lease** | $ 77,000 |
| **Cosmetics Department sales commissions-Northridge Store** | $ 4,000 |
| **Corporate legal office salaries** | $ 59,000 |
| **Store manager's salary-Northridge Store** | $ 11,000 |
| **Heating-Northridge Store** | $ 10,000 |
| **Cosmetics Department cost of sales-Northridge Store** | $ 37,000 |
| **Central warehouse lease cost** | $ 16,000 |
| **Store security-Northridge Store** | $ 12,000 |
| **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.  
What is the total amount of the costs listed above that are NOT direct costs of the Northridge Store?

$152,000

$33,000

$45,000

$77,000

1. The following cost data pertain to the operations of Ladwig Department Stores, Incorporated, for the month of December.

|  |  |
| --- | --- |
| **Corporate legal office salaries** | $ 68,000 |
| **Shoe Department cost of sales-Brentwood Store** | $ 66,000 |
| **Corporate headquarters building lease** | $ 86,000 |
| **Store manager's salary-Brentwood Store** | $ 10,000 |
| **Shoe Department sales commissions-Brentwood Store** | $ 5,000 |
| **Store utilities-Brentwood Store** | $ 11,000 |
| **Shoe Department manager's salary-Brentwood Store** | $ 3,000 |
| **Central warehouse lease cost** | $ 3,000 |
| **Janitorial costs-Brentwood Store** | $ 11,000 |

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

$66,000

$74,000

$106,000

$71,000

1. The following cost data pertain to the operations of Ladwig Department Stores, Incorporated, for the month of December.

|  |  |
| --- | --- |
| **Corporate legal office salaries** | $ 68,000 |
| **Shoe Department cost of sales-Brentwood Store** | $ 66,000 |
| **Corporate headquarters building lease** | $ 86,000 |
| **Store manager's salary-Brentwood Store** | $ 10,000 |
| **Shoe Department sales commissions-Brentwood Store** | $ 5,000 |
| **Store utilities-Brentwood Store** | $ 11,000 |
| **Shoe Department manager's salary-Brentwood Store** | $ 3,000 |
| **Central warehouse lease cost** | $ 3,000 |
| **Janitorial costs-Brentwood Store** | $ 11,000 |

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

$74,000

$32,000

$157,000

$86,000

1. Dake Corporation's relevant range of activity is 4,000 units to 7,500 units. When it produces and sells 5,750 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 7.10 |
| **Direct labor** | $ 3.30 |
| **Variable manufacturing overhead** | $ 1.90 |
| **Fixed manufacturing overhead** | $ 3.60 |
| **Fixed selling expense** | $ 0.80 |
| **Fixed administrative expense** | $ 0.50 |
| **Sales commissions** | $ 0.60 |
| **Variable administrative expense** | $ 0.50 |

For financial reporting purposes, the total amount of product costs incurred to make 5,750 units is closest to:

$91,425

$70,725

$97,175

$20,700

1. Dake Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.55 |
| **Direct labor** | $ 3.50 |
| **Variable manufacturing overhead** | $ 1.40 |
| **Fixed manufacturing overhead** | $ 2.60 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

For financial reporting purposes, the total amount of product costs incurred to make 4,000 units is closest to:

$56,200

$45,800

$60,200

$10,400

1. Dake Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.55 |
| **Direct labor** | $ 3.50 |
| **Variable manufacturing overhead** | $ 1.40 |
| **Fixed manufacturing overhead** | $ 2.60 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

For financial reporting purposes, the total amount of period costs incurred to sell 4,000 units is closest to:

$7,800

$8,100

$4,400

$12,200

1. Dake Corporation's relevant range of activity is 3,100 units to 6,500 units. When it produces and sells 4,800 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 7.00 |
| **Direct labor** | $ 3.10 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 1.05 |
| **Fixed administrative expense** | $ 0.75 |
| **Sales commissions** | $ 0.85 |
| **Variable administrative expense** | $ 0.75 |

If 3,800 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$38,380

$45,030

$56,430

$48,450

1. Dake Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.55 |
| **Direct labor** | $ 3.50 |
| **Variable manufacturing overhead** | $ 1.40 |
| **Fixed manufacturing overhead** | $ 2.60 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

If 3,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$30,150

$34,350

$42,150

$34,650

1. Dake Corporation's relevant range of activity is 4,000 units to 8,000 units. When it produces and sells 6,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 7.15 |
| **Direct labor** | $ 3.40 |
| **Variable manufacturing overhead** | $ 1.95 |
| **Fixed manufacturing overhead** | $ 3.20 |
| **Fixed selling expense** | $ 0.85 |
| **Fixed administrative expense** | $ 0.55 |
| **Sales commissions** | $ 0.65 |
| **Variable administrative expense** | $ 0.55 |

If 5,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$9,750

$19,200

$28,950

$25,750

1. Dake Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.55 |
| **Direct labor** | $ 3.50 |
| **Variable manufacturing overhead** | $ 1.40 |
| **Fixed manufacturing overhead** | $ 2.60 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

If 3,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$4,200

$10,400

$14,600

$12,000

1. Glew Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.00 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.75 |  |
| **Fixed manufacturing overhead** |  | $ 8,800 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

For financial reporting purposes, the total amount of product costs incurred to make 4,000 units is closest to:

$57,200

$8,800

$44,400

$53,200

1. Glew Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.00 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.75 |  |
| **Fixed manufacturing overhead** |  | $ 8,800 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

For financial reporting purposes, the total amount of period costs incurred to sell 4,000 units is closest to:

$6,400

$9,600

$4,000

$5,600

1. Glew Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.00 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.75 |  |
| **Fixed manufacturing overhead** |  | $ 8,800 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If 3,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$33,300

$31,050

$28,050

$39,900

1. Glew Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.00 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.75 |  |
| **Fixed manufacturing overhead** |  | $ 8,800 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If 3,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$5,250

$11,850

$8,800

$14,050

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

For financial reporting purposes, the total amount of product costs incurred to make 5,000 units is closest to:

$72,000

$77,000

$11,000

$61,000

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

For financial reporting purposes, the total amount of period costs incurred to sell 5,000 units is closest to:

$12,500

$8,300

$7,000

$5,500

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If 4,000 units are sold, the variable cost per unit sold is closest to:

$13.60

$12.20

$14.40

$16.90

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If 4,000 units are sold, the total variable cost is closest to:

$54,400

$48,800

$57,600

$67,600

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.55 |  |
| **Direct labor** | $ 3.30 |  |
| **Variable manufacturing overhead** | $ 1.95 |  |
| **Fixed manufacturing overhead** |  | $ 19,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.80 |  |
| **Fixed selling and administrative expense** |  | $ 5,900 |

If 9,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$35,550

$36,550

$34,550

$48,250

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If 4,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$14,600

$17,600

$11,600

$23,600

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If the selling price is $18.70 per unit, the contribution margin per unit sold is closest to:

$5.10

$1.80

$4.30

$8.15

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If 6,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$73,200

$69,300

$86,400

$63,300

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

If 6,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$23,100

$9,900

$11,000

$20,900

1. Schwiesow Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 11,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 5,500 |

The incremental manufacturing cost that the company will incur if it increases production from 5,000 to 5,001 units is closest to:

$14.40

$15.10

$16.90

$12.20

1. Lambeth Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.90 |  |
| **Direct labor** | $ 2.95 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If 3,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$26,550

$23,550

$33,300

$27,300

1. Lambeth Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.90 |  |
| **Direct labor** | $ 2.95 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If 3,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$8,000

$11,750

$9,750

$3,750

1. Mccaskell Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average**  **Cost per Unit** |
| **Direct materials** | $ 6.30 |
| **Direct labor** | $ 3.65 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Fixed manufacturing overhead** | $ 9.90 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If 8,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$79,600

$93,600

$87,600

$172,800

1. Mccaskell Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average**  **Cost per Unit** |
| **Direct materials** | $ 6.30 |
| **Direct labor** | $ 3.65 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Fixed manufacturing overhead** | $ 9.90 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If 8,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$14,000

$93,200

$89,100

$103,100

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.10 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 14,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 4,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$16,300

$25,600

$19,400

$13,200

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.10 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 14,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If the selling price is $21.90 per unit, the contribution margin per unit sold is closest to:

$9.35

$12.60

$8.45

$5.65

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.10 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 14,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 6,000 units are produced, the total amount of direct manufacturing cost incurred is closest to:

$55,800

$63,900

$80,700

$64,800

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.00 |  |
| **Direct labor** | $ 3.90 |  |
| **Variable manufacturing overhead** | $ 1.40 |  |
| **Fixed manufacturing overhead** |  | $ 13,200 |
| **Sales commissions** | $ 1.80 |  |
| **Variable administrative expense** | $ 0.80 |  |
| **Fixed selling and administrative expense** |  | $ 6,600 |

If 5,500 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$7,700

$47,300

$20,900

$13,200

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.10 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 14,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 6,000 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

$8,100

$24,900

$22,100

$14,000

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.70 |  |
| **Direct labor** | $ 3.30 |  |
| **Variable manufacturing overhead** | $ 1.65 |  |
| **Fixed manufacturing overhead** |  | $ 23,000 |
| **Sales commissions** | $ 1.20 |  |
| **Variable administrative expense** | $ 0.80 |  |
| **Fixed selling and administrative expense** |  | $ 5,000 |

The incremental manufacturing cost that the company will incur if it increases production from 10,000 to 10,001 units is closest to:

$11.65

$15.15

$16.45

$13.95

1. Kesterson Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 3.10 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 14,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

The incremental manufacturing cost that the company will incur if it increases production from 5,000 to 5,001 units is closest to:

$10.65

$13.45

$16.25

$13.95

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 64,000 |
| **Wages paid to the workers who paint the figurines** | $ 93,000 |
| **Wages paid to the sales manager's secretary** | $ 25,000 |
| **Cost of junk mail advertising** | $ 42,000 |

What is the total of the direct costs above?

$64,000

$118,000

$157,000

$199,000

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 65,000 |
| **Wages paid to the workers who paint the figurines** | $ 90,000 |
| **Wages paid to the sales manager's secretary** | $ 22,000 |
| **Cost of junk mail advertising** | $ 47,000 |

What is the total of the direct costs above?

$65,000

$112,000

$155,000

$202,000

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 81,000 |
| **Wages paid to the workers who paint the figurines** | $ 89,000 |
| **Wages paid to the sales manager's secretary** | $ 41,000 |
| **Cost of junk mail advertising** | $ 58,000 |

What is the total of the product costs above?

$0

$99,000

$170,000

$188,000

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 65,000 |
| **Wages paid to the workers who paint the figurines** | $ 90,000 |
| **Wages paid to the sales manager's secretary** | $ 22,000 |
| **Cost of junk mail advertising** | $ 47,000 |

What is the total of the product costs above?

$0

$69,000

$155,000

$159,000

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 71,000 |
| **Wages paid to the workers who paint the figurines** | $ 84,000 |
| **Wages paid to the sales manager's secretary** | $ 36,000 |
| **Cost of junk mail advertising** | $ 53,000 |

What is the total of the conversion costs above?

$71,000

$89,000

$84,000

$155,000

1. Vignana Corporation manufactures and sells hand-painted clay figurines of popular sports heroes. Shown below are some of the costs incurred by Vignana for last year:

|  |  |
| --- | --- |
| **Cost of clay used in production** | $ 65,000 |
| **Wages paid to the workers who paint the figurines** | $ 90,000 |
| **Wages paid to the sales manager's secretary** | $ 22,000 |
| **Cost of junk mail advertising** | $ 47,000 |

What is the total of the conversion costs above?

$65,000

$69,000

$90,000

$155,000

1. A partial listing of costs incurred at Archut Corporation during September appears below:

|  |  |
| --- | --- |
| **Direct materials** | $ 113,000 |
| **Utilities, factory** | $ 5,000 |
| **Administrative salaries** | $ 81,000 |
| **Indirect labor** | $ 25,000 |
| **Sales commissions** | $ 48,000 |
| **Depreciation of production equipment** | $ 20,000 |
| **Depreciation of administrative equipment** | $ 30,000 |
| **Direct labor** | $ 129,000 |
| **Advertising** | $ 135,000 |

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

$586,000

$50,000

$292,000

$30,000

1. A partial listing of costs incurred at Archut Corporation during September appears below:

|  |  |
| --- | --- |
| **Direct materials** | $ 113,000 |
| **Utilities, factory** | $ 5,000 |
| **Administrative salaries** | $ 81,000 |
| **Indirect labor** | $ 25,000 |
| **Sales commissions** | $ 48,000 |
| **Depreciation of production equipment** | $ 20,000 |
| **Depreciation of administrative equipment** | $ 30,000 |
| **Direct labor** | $ 129,000 |
| **Advertising** | $ 135,000 |

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

$292,000

$294,000

$50,000

$586,000

1. A partial listing of costs incurred at Archut Corporation during September appears below:

|  |  |
| --- | --- |
| **Direct materials** | $ 113,000 |
| **Utilities, factory** | $ 5,000 |
| **Administrative salaries** | $ 81,000 |
| **Indirect labor** | $ 25,000 |
| **Sales commissions** | $ 48,000 |
| **Depreciation of production equipment** | $ 20,000 |
| **Depreciation of administrative equipment** | $ 30,000 |
| **Direct labor** | $ 129,000 |
| **Advertising** | $ 135,000 |

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

$294,000

$344,000

$292,000

$50,000

1. A partial listing of costs incurred during March at Febbo Corporation appears below:

|  |  |
| --- | --- |
| **Factory supplies** | $ 9,000 |
| **Administrative wages and salaries** | $ 85,000 |
| **Direct materials** | $ 126,000 |
| **Sales staff salaries** | $ 30,000 |
| **Factory depreciation** | $ 33,000 |
| **Corporate headquarters building rent** | $ 43,000 |
| **Indirect labor** | $ 26,000 |
| **Marketing** | $ 65,000 |
| **Direct labor** | $ 99,000 |

The total of the period costs listed above for March is:

$68,000

$293,000

$291,000

$223,000

1. A partial listing of costs incurred during March at Febbo Corporation appears below:

|  |  |
| --- | --- |
| **Factory supplies** | $ 9,000 |
| **Administrative wages and salaries** | $ 85,000 |
| **Direct materials** | $ 126,000 |
| **Sales staff salaries** | $ 30,000 |
| **Factory depreciation** | $ 33,000 |
| **Corporate headquarters building rent** | $ 43,000 |
| **Indirect labor** | $ 26,000 |
| **Marketing** | $ 65,000 |
| **Direct labor** | $ 99,000 |

The total of the manufacturing overhead costs listed above for March is:

$68,000

$35,000

$516,000

$293,000

1. A partial listing of costs incurred during March at Febbo Corporation appears below:

|  |  |
| --- | --- |
| **Factory supplies** | $ 9,000 |
| **Administrative wages and salaries** | $ 85,000 |
| **Direct materials** | $ 126,000 |
| **Sales staff salaries** | $ 30,000 |
| **Factory depreciation** | $ 33,000 |
| **Corporate headquarters building rent** | $ 43,000 |
| **Indirect labor** | $ 26,000 |
| **Marketing** | $ 65,000 |
| **Direct labor** | $ 99,000 |

The total of the product costs listed above for March is:

$516,000

$68,000

$293,000

$223,000

1. Fasheh Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.50 |
| **Direct labor** | $ 3.90 |
| **Variable manufacturing overhead** | $ 1.30 |
| **Fixed manufacturing overhead** | $ 13.50 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If 10,000 units are produced, the average fixed manufacturing cost per unit produced is closest to:

$15.00

$12.83

$13.50

$12.15

1. Fasheh Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.50 |
| **Direct labor** | $ 3.90 |
| **Variable manufacturing overhead** | $ 1.30 |
| **Fixed manufacturing overhead** | $ 13.50 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If 10,000 units are produced, the total amount of fixed manufacturing cost incurred is closest to:

$128,250

$121,500

$148,500

$135,000

1. Fasheh Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.50 |
| **Direct labor** | $ 3.90 |
| **Variable manufacturing overhead** | $ 1.30 |
| **Fixed manufacturing overhead** | $ 13.50 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If 10,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$180,500

$134,500

$157,500

$146,000

1. Rhome Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.40 |
| **Direct labor** | $ 3.55 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.60 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are sold, the variable cost per unit sold is closest to:

$13.65

$10.65

$16.05

$12.05

1. Rhome Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.40 |
| **Direct labor** | $ 3.55 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.60 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are sold, the total variable cost is closest to:

$53,250

$68,250

$80,250

$60,250

1. Rhome Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.40 |
| **Direct labor** | $ 3.55 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.60 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are produced, the average fixed manufacturing cost per unit produced is closest to:

$3.75

$2.40

$2.70

$3.00

1. Rhome Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.40 |
| **Direct labor** | $ 3.55 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.60 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are produced, the total amount of fixed manufacturing cost incurred is closest to:

$13,500

$18,000

$12,000

$15,000

1. Rhome Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.40 |
| **Direct labor** | $ 3.55 |
| **Variable manufacturing overhead** | $ 1.70 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.60 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.40 |

If 5,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$20,500

$23,000

$18,000

$19,250

1. Wessner Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 2.80 |  |
| **Variable manufacturing overhead** | $ 1.45 |  |
| **Fixed manufacturing overhead** |  | $ 12,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If 5,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$18,000

$19,250

$18,625

$20,500

1. Wessner Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 2.80 |  |
| **Variable manufacturing overhead** | $ 1.45 |  |
| **Fixed manufacturing overhead** |  | $ 12,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

If the selling price is $25.00 per unit, the contribution margin per unit sold is closest to:

$9.00

$16.00

$11.55

$13.00

1. Wessner Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | $ 2.80 |  |
| **Variable manufacturing overhead** | $ 1.45 |  |
| **Fixed manufacturing overhead** |  | $ 12,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,000 |

The incremental manufacturing cost that the company will incur if it increases production from 4,000 to 4,001 units is closest to:

$16.00

$14.05

$10.45

$13.45

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.35 |  |
| **Direct labor** | $ 3.75 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 15,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 4,000 units are sold, the variable cost per unit sold is closest to:

$16.55

$11.60

$12.65

$14.60

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.60 |  |
| **Direct labor** | $ 3.60 |  |
| **Variable manufacturing overhead** | $ 1.40 |  |
| **Fixed manufacturing overhead** |  | $ 23,400 |
| **Sales commissions** | $ 0.60 |  |
| **Variable administrative expense** | $ 0.65 |  |
| **Fixed selling and administrative expense** |  | $ 3,000 |

If 6,500 units are sold, the total variable cost is closest to:

$93,600

$112,450

$83,525

$75,400

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.35 |  |
| **Direct labor** | $ 3.75 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 15,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 4,000 units are sold, the total variable cost is closest to:

$58,400

$66,200

$50,600

$46,400

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.45 |  |
| **Direct labor** | $ 3.30 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 16,500 |
| **Sales commissions** | $ 0.45 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 4,200 |

If 5,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$22,750

$14,750

$18,450

$30,750

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.35 |  |
| **Direct labor** | $ 3.75 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 15,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If 4,000 units are produced, the total amount of manufacturing overhead cost is closest to:

$21,000

$14,000

$28,000

$17,500

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.45 |  |
| **Direct labor** | $ 3.30 |  |
| **Variable manufacturing overhead** | $ 1.25 |  |
| **Fixed manufacturing overhead** |  | $ 16,500 |
| **Sales commissions** | $ 0.45 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 4,200 |

If the selling price is $20.30 per unit, the contribution margin per unit sold is closest to:

$3.45

$5.10

$8.35

$10.55

1. Pedregon Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.35 |  |
| **Direct labor** | $ 3.75 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 15,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 4,500 |

If the selling price is $20.60 per unit, the contribution margin per unit sold is closest to:

$4.05

$6.00

$7.95

$10.50

1. Fassino Corporation reported the following data for the month of November:

|  |  |
| --- | --- |
| **Direct materials** | $ 51,000 |
| **Direct labor cost** | $ 54,000 |
| **Manufacturing overhead** | $ 82,000 |
| **Selling expense** | $ 18,000 |
| **Administrative expense** | $ 42,000 |

The conversion cost for November was:

$187,000

$112,000

$136,000

$140,000

1. Fassino Corporation reported the following data for the month of November:

|  |  |
| --- | --- |
| **Direct materials** | $ 51,000 |
| **Direct labor cost** | $ 54,000 |
| **Manufacturing overhead** | $ 82,000 |
| **Selling expense** | $ 18,000 |
| **Administrative expense** | $ 42,000 |

The prime cost for November was:

$136,000

$60,000

$105,000

$112,000

1. Management of Mcgibboney Corporation has asked your help as an intern in preparing some key reports for November. Direct materials cost was $42,000, direct labor cost was $25,000, and manufacturing overhead was $62,000. Selling expense was $21,000 and administrative expense was $38,000.  
   The conversion cost for November was:

$116,000

$79,000

$87,000

$129,000

1. Management of Mcgibboney Corporation has asked your help as an intern in preparing some key reports for November. Direct materials cost was $42,000, direct labor cost was $25,000, and manufacturing overhead was $62,000. Selling expense was $21,000 and administrative expense was $38,000.  
   The prime cost for November was:

$79,000

$59,000

$67,000

$87,000

1. Barredo Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.60 |
| **Direct labor** | $ 3.65 |
| **Variable manufacturing overhead** | $ 1.65 |
| **Fixed manufacturing overhead** | $ 2.80 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If 4,000 units are sold, the variable cost per unit sold is closest to:

$16.75

$12.85

$11.90

$14.70

1. Barredo Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.60 |
| **Direct labor** | $ 3.65 |
| **Variable manufacturing overhead** | $ 1.65 |
| **Fixed manufacturing overhead** | $ 2.80 |
| **Fixed selling expense** | $ 0.70 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If 4,000 units are sold, the total variable cost is closest to:

$67,000

$47,600

$51,400

$58,800

1. Varela Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average**  **Cost per Unit** |
| **Direct materials** | $ 5.95 |
| **Direct labor** | $ 3.30 |
| **Variable manufacturing overhead** | $ 1.60 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.50 |

For financial reporting purposes, the total amount of product costs incurred to make 4,000 units is closest to:

$43,400

$55,400

$59,400

$12,000

1. Varela Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average**  **Cost per Unit** |
| **Direct materials** | $ 5.95 |
| **Direct labor** | $ 3.30 |
| **Variable manufacturing overhead** | $ 1.60 |
| **Fixed manufacturing overhead** | $ 3.00 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.50 |

For financial reporting purposes, the total amount of period costs incurred to sell 4,000 units is closest to:

$7,700

$11,600

$3,600

$8,000

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.85 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 4,400 |

For financial reporting purposes, the total amount of product costs incurred to make 4,000 units is closest to:

$46,200

$38,200

$8,000

$50,200

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.45 |  |
| **Direct labor** | $ 4.30 |  |
| **Variable manufacturing overhead** | $ 1.60 |  |
| **Fixed manufacturing overhead** |  | $ 13,000 |
| **Sales commissions** | $ 2.20 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 6,000 |

For financial reporting purposes, the total amount of period costs incurred to sell 6,500 units is closest to:

$23,550

$17,550

$6,000

$13,000

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.85 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 4,400 |

For financial reporting purposes, the total amount of period costs incurred to sell 4,000 units is closest to:

$12,200

$7,800

$4,400

$8,100

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.50 |  |
| **Direct labor** | $ 3.20 |  |
| **Variable manufacturing overhead** | $ 1.20 |  |
| **Fixed manufacturing overhead** |  | $ 9,900 |
| **Sales commissions** | $ 1.20 |  |
| **Variable administrative expense** | $ 0.30 |  |
| **Fixed selling and administrative expense** |  | $ 3,300 |

If 5,500 units are sold, the variable cost per unit sold is closest to:

$13.40

$10.40

$8.90

$10.90

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.85 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 4,400 |

If 5,000 units are sold, the variable cost per unit sold is closest to:

$14.60

$11.50

$9.55

$11.55

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.40 |  |
| **Direct labor** | $ 4.20 |  |
| **Variable manufacturing overhead** | $ 1.55 |  |
| **Fixed manufacturing overhead** |  | $ 11,400 |
| **Sales commissions** | $ 2.10 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 4,900 |

If 6,000 units are sold, the total variable cost is closest to:

$66,900

$106,200

$82,200

$82,500

1. Lagle Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 4.85 |  |
| **Direct labor** | $ 3.35 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 8,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 4,400 |

If 5,000 units are sold, the total variable cost is closest to:

$47,750

$73,000

$57,500

$57,750

1. Bowering Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.60 |  |
| **Direct labor** | $ 3.85 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 81,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 44,550 |

For financial reporting purposes, the total amount of product costs incurred to make 9,000 units is closest to:

$81,000

$188,550

$107,550

$197,550

1. Bowering Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.60 |  |
| **Direct labor** | $ 3.85 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 81,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 44,550 |

For financial reporting purposes, the total amount of period costs incurred to sell 9,000 units is closest to:

$35,700

$9,000

$53,550

$44,550

1. Mark is an engineer who has designed a telecommunications device. He is convinced that there is a big potential market for the device. Accordingly, he has decided to quit his present job and start a company to manufacture and market the device.  
   The salary that Mark earns at his present employ is:

a variable cost

a fixed cost

a product cost

an opportunity cost

1. Mark is an engineer who has designed a telecommunications device. He is convinced that there is a big potential market for the device. Accordingly, he has decided to quit his present job and start a company to manufacture and market the device.  
   Mark purchased a machine two years ago to make experimental boards. The machine will be used to manufacture the new board. The cost of this machine is:

an opportunity cost

a sunk cost

a differential cost

a period cost

1. Mark is an engineer who has designed a telecommunications device. He is convinced that there is a big potential market for the device. Accordingly, he has decided to quit his present job and start a company to manufacture and market the device.  
   The cost of the raw materials that will be used in manufacturing the computer board is:

a sunk cost

a fixed cost

a period cost

a variable cost

1. Mark is an engineer who has designed a telecommunications device. He is convinced that there is a big potential market for the device. Accordingly, he has decided to quit his present job and start a company to manufacture and market the device.  
   Rent on the administrative office space is:

a variable cost

an opportunity cost

a period cost

a product cost

1. Mark is an engineer who has designed a telecommunications device. He is convinced that there is a big potential market for the device. Accordingly, he has decided to quit his present job and start a company to manufacture and market the device.  
   Property taxes on the building that will be purchased to house the manufacturing facility are:

a product cost

a variable cost

an opportunity cost

a period cost

1. At a sales volume of 38,000 units, Tirri Corporation's property taxes (a cost that is fixed with respect to sales volume) total $733,400.  
   To the nearest whole dollar, what should be the total property taxes at a sales volume of 37,200 units? (Assume that this sales volume is within the relevant range.)

$725,680

$733,400

$749,172

$717,960

1. At a sales volume of 38,000 units, Tirri Corporation's property taxes (a cost that is fixed with respect to sales volume) total $733,400.  
   To the nearest whole cent, what should be the average property tax per unit at a sales volume of 37,300 units? (Assume that this sales volume is within the relevant range.)

$19.30

$19.66

$19.72

$19.48

1. Leas 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 25,000 calls in a month, the costs of operating the helpline total $452,500.  
   To the nearest whole dollar, what should be the total cost of operating the helpline costs at a volume of 23,900 calls in a month? (Assume that this call volume is within the relevant range.)  
   **Note: Round intermediate calculations to 2 decimal places.**

$442,545

$452,500

$473,326

$432,590

1. Leas 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 25,000 calls in a month, the costs of operating the helpline total $452,500.  
   To the nearest whole cent, what should be the average cost of operating the helpline per call at a volume of 25,300 calls in a month? (Assume that this call volume is within the relevant range.)

$18.93

$18.00

$17.89

$18.10

1. Dizzy Amusement Park is open from 8:00 am till midnight every day of the year. Dizzy charges its patrons a daily entrance fee of $30 per person which gives them unlimited access to all of the park's 35 rides.  
   Dizzy gives out a free T-shirt to every 100th customer entering the park. The cost of this T-shirt would best be described as a:

fixed cost

mixed cost

step-variable cost

true variable cost

1. Dizzy Amusement Park is open from 8:00 am till midnight every day of the year. Dizzy charges its patrons a daily entrance fee of $30 per person which gives them unlimited access to all of the park's 35 rides.  
   For liability insurance, Dizzy pays a set monthly fee plus a small additional amount for every patron entering the park. The cost of liability insurance would best be described as a:

fixed cost

mixed cost

step-variable cost

true variable cost

1. Dizzy Amusement Park is open from 8:00 am till midnight every day of the year. Dizzy charges its patrons a daily entrance fee of $30 per person which gives them unlimited access to all of the park's 35 rides.  
   Dizzy employees a certified operator for each of its 35 rides. Each operator is paid $20 per hour. The cost of the certified operators would best be described as a:

fixed cost

mixed cost

step-variable cost

true variable cost

1. Dizzy Amusement Park is open from 8:00 am till midnight every day of the year. Dizzy charges its patrons a daily entrance fee of $30 per person which gives them unlimited access to all of the park's 35 rides.  
   Dizzy donates $2 of every entrance fee to a local homeless shelter. This charitable contribution would best be described as a:

fixed cost

mixed cost

step-variable cost

true variable cost

1. At a sales volume of 36,500 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total $576,700.  
   To the nearest whole dollar, what should be the total sales commissions at a sales volume of 35,000 units? (Assume that this sales volume is within the relevant range.)  
   **Note: Round intermediate calculations to 2 decimal places.**

$564,850

$576,700

$553,000

$601,416

1. At a sales volume of 20,000 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total $132,000.  
   To the nearest whole dollar, what should be the total sales commissions at a sales volume of 18,400 units? (Assume that this sales volume is within the relevant range.)  
   **Note: Round intermediate calculations to 2 decimal places.**

$126,720

$132,000

$121,440

$143,478

1. At a sales volume of 44,000 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total $585,200.  
   To the nearest whole cent, what should be the average sales commission per unit at a sales volume of 46,300 units? (Assume that this sales volume is within the relevant range.)

$13.30

$13.64

$13.87

$12.64

1. At a sales volume of 20,000 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total $132,000.  
   To the nearest whole cent, what should be the average sales commission per unit at a sales volume of 18,500 units? (Assume that this sales volume is within the relevant range.)

$6.60

$6.87

$7.17

$7.14

1. Adens Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.25 |
| **Direct labor** | $ 2.80 |
| **Variable manufacturing overhead** | $ 1.55 |
| **Fixed manufacturing overhead** | $ 2.40 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If 5,000 units are sold, the variable cost per unit sold is closest to:

$13.00

$10.60

$12.10

$15.40

1. Adens Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.25 |
| **Direct labor** | $ 2.80 |
| **Variable manufacturing overhead** | $ 1.55 |
| **Fixed manufacturing overhead** | $ 2.40 |
| **Fixed selling expense** | $ 0.50 |
| **Fixed administrative expense** | $ 0.40 |
| **Sales commissions** | $ 1.00 |
| **Variable administrative expense** | $ 0.50 |

If 5,000 units are sold, the total variable cost is closest to:

$53,000

$65,000

$60,500

$77,000

1. Batterson 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 28,000 units, the lease cost was $697,200.  
   To the nearest whole dollar, what should be the total lease cost at a sales volume of 29,200 units in a month? (Assume that this sales volume is within the relevant range.)

$712,140

$697,200

$727,080

$668,548

1. Batterson 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 28,000 units, the lease cost was $697,200.  
   To the nearest whole cent, what should be the average lease cost per unit at a sales volume of 26,400 units in a month? (Assume that this sales volume is within the relevant range.)

$25.66

$24.90

$23.88

$26.41

1. Oerther Corporation reports that at an activity level of 5,000 units, its total variable cost is $131,750 and its total fixed cost is $31,200.  
   What would be the total variable cost at an activity level of 5,200 units? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$137,020

$131,750

$162,950

$32,448

1. Oerther Corporation reports that at an activity level of 5,000 units, its total variable cost is $131,750 and its total fixed cost is $31,200.  
   What would be the average fixed cost per unit at an activity level of 5,200 units? Assume that this level of activity is within the relevant range.

$6.24

$6.00

$14.94

$32.59

1. At an activity level of 9,000 machine-hours in a month, Moffatt Corporation’s total variable maintenance cost is $390,240 and its total fixed maintenance cost is $368,280.  
   What would be the total variable maintenance cost at an activity level of 9,300 machine-hours in a month? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$758,520

$403,248

$390,240

$380,556

1. At an activity level of 9,000 machine-hours in a month, Moffatt Corporation’s total variable maintenance cost is $390,240 and its total fixed maintenance cost is $368,280.  
   What would be the average fixed maintenance cost per unit at an activity level of 9,300 machine-hours in a month? Assume that this level of activity is within the relevant range.

$40.92

$84.28

$39.60

$54.93

1. At a sales volume of 40,000 units, Lonnie Company's total fixed costs are $40,000 and total variable costs are $60,000. The relevant range is 30,000 to 50,000 units.  
   If Lonnie were to sell 42,000 units, the total expected cost would be:

$105,000

$100,000

$103,000

$102,000

1. At a sales volume of 40,000 units, Lonnie Company's total fixed costs are $40,000 and total variable costs are $60,000. The relevant range is 30,000 to 50,000 units.  
   If Lonnie were to sell 50,000 units, the total expected cost per unit would be:  
   **Note: Round intermediate calculations to 2 decimal places.**

$2.20

$2.30

$2.50

$2.00

1. Erkkila Incorporated reports that at an activity level of 6,600 machine-hours in a month, its total variable inspection cost is $426,230 and its total fixed inspection cost is $188,301.  
   What would be the average fixed inspection cost per unit at an activity level of 6,900 machine-hours in a month? Assume that this level of activity is within the relevant range.

$93.11

$28.53

$37.29

$27.29

1. Erkkila Incorporated reports that at an activity level of 2,100 machine-hours in a month, its total variable inspection cost is $69,846 and its total fixed inspection cost is $9,072.  
   What would be the average fixed inspection cost per unit at an activity level of 2,400 machine-hours in a month? Assume that this level of activity is within the relevant range.

$37.58

$4.32

$15.23

$3.78

1. Erkkila Incorporated reports that at an activity level of 2,100 machine-hours in a month, its total variable inspection cost is $69,846 and its total fixed inspection cost is $9,072.  
   What would be the total variable inspection cost at an activity level of 2,400 machine-hours in a month? Assume that this level of activity is within the relevant range.  
   **Note: Round intermediate calculations to 2 decimal places.**

$78,918

$69,846

$79,824

$10,368

1. Kogler Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.20 |
| **Direct labor** | $ 5.40 |
| **Variable manufacturing overhead** | $ 2.00 |
| **Fixed manufacturing overhead** | $ 9.00 |
| **Fixed selling expense** | $ 3.80 |
| **Fixed administrative expense** | $ 1.50 |
| **Sales commissions** | $ 0.70 |
| **Variable administrative expense** | $ 0.65 |

If the selling price is $28.00 per unit, the contribution margin per unit sold is closest to:

$14.05

($0.25)

$6.40

$17.40

1. Kogler Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 4.85 |
| **Direct labor** | $ 4.20 |
| **Variable manufacturing overhead** | $ 1.55 |
| **Fixed manufacturing overhead** | $ 9.00 |
| **Fixed selling expense** | $ 3.15 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

If the selling price is $25.00 per unit, the contribution margin per unit sold is closest to:

$13.45

($0.50)

$5.40

$15.95

1. Kogler Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 4.85 |
| **Direct labor** | $ 4.20 |
| **Variable manufacturing overhead** | $ 1.55 |
| **Fixed manufacturing overhead** | $ 9.00 |
| **Fixed selling expense** | $ 3.15 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.45 |

The incremental manufacturing cost that the company will incur if it increases production from 9,000 to 9,001 units is closest to:

$10.60

$22.75

$19.60

$25.50

1. The University Store, Incorporated is the major bookseller for four nearby colleges. An income statement for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| University Store, Incorporated | | |
| Income Statement | | |
| For the Quarter Ended March 31 | | |
| **Sales** |  | $ 800,000 |
| **Cost of goods sold** |  | 560,000 |
| **Gross margin** |  | 240,000 |
| **Selling and administrative expenses:** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 110,000 | 210,000 |
| **Net operating income** |  | $ 30,000 |

On average, a book sells for $40.00. Variable selling expenses are $3.00 per book; the remaining selling expenses are fixed. The variable administrative expenses are 5% of sales; the remainder of the administrative expenses are fixed.  
The contribution margin for the University Store for the first quarter is:

$660,000

$700,000

$180,000

$140,000

1. The University Store, Incorporated is the major bookseller for four nearby colleges. An income statement for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| University Store, Incorporated | | |
| Income Statement | | |
| For the Quarter Ended March 31 | | |
| **Sales** |  | $ 800,000 |
| **Cost of goods sold** |  | 560,000 |
| **Gross margin** |  | 240,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 110,000 | 210,000 |
| **Net operating income** |  | $ 30,000 |

On average, a book sells for $40.00. Variable selling expenses are $3.00 per book; the remaining selling expenses are fixed. The variable administrative expenses are 5% of sales; the remainder of the administrative expenses are fixed.  
The net operating income computed using the contribution approach for the first quarter is:

$30,000

$180,000

$140,000

$0

1. The University Store, Incorporated is the major bookseller for four nearby colleges. An income statement for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| University Store, Incorporated | | |
| Income Statement | | |
| For the Quarter Ended March 31 | | |
| **Sales** |  | $ 800,000 |
| **Cost of goods sold** |  | 560,000 |
| **Gross margin** |  | 240,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 110,000 | 210,000 |
| **Net operating income** |  | $ 30,000 |

On average, a book sells for $40.00. Variable selling expenses are $3.00 per book; the remaining selling expenses are fixed. The variable administrative expenses are 5% of sales; the remainder of the administrative expenses are fixed.  
The cost formula for selling and administrative expenses with "X" equal to the number of books sold is:

Y = $105,000 + $3X

Y = $105,000 + $5X

Y = $110,000 + $5X

Y = $110,000 + $33X

1. The University Store, Incorporated is the major bookseller for four nearby colleges. An income statement for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| University Store, Incorporated | | |
| Income Statement | | |
| For the Quarter Ended March 31 | | |
| **Sales** |  | $ 800,000 |
| **Cost of goods sold** |  | 560,000 |
| **Gross margin** |  | 240,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 110,000 | 210,000 |
| **Net operating income** |  | $ 30,000 |

On average, a book sells for $40.00. Variable selling expenses are $3.00 per book; the remaining selling expenses are fixed. The variable administrative expenses are 5% of sales; the remainder of the administrative expenses are fixed.  
If 25,000 books are sold during the second quarter and this activity is within the relevant range, the company's expected contribution margin would be:

$875,000

$300,000

$175,000

$65,000

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 900,000 |
| **Cost of goods sold** |  | 555,000 |
| **Gross margin** |  | 345,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 118,000 |  |
| **Administrative** | 140,000 | 258,000 |
| **Net operating income** |  | $ 87,000 |

On average, a book sells for $60. Variable selling expenses are $6 per book with the remaining selling expenses being fixed. The variable administrative expenses are 5% of sales with the remainder being fixed.  
The contribution margin for Sam's Bookstore for the first quarter is:

$255,000

$765,000

$210,000

$690,000

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 900,000 |
| **Cost of goods sold** |  | 630,000 |
| **Gross margin** |  | 270,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 104,000 | 204,000 |
| **Net operating income** |  | $ 66,000 |

On average, a book sells for $50. Variable selling expenses are $5 per book with the remaining selling expenses being fixed. The variable administrative expenses are 4% of sales with the remainder being fixed.  
The contribution margin for Sam's Bookstore for the first quarter is:

$180,000

$774,000

$144,000

$756,000

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 980,000 |
| **Cost of goods sold** |  | 680,000 |
| **Gross margin** |  | 300,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 110,000 |  |
| **Administrative** | 124,000 | 234,000 |
| **Net operating income** |  | $ 66,000 |

On average, a book sells for $70. Variable selling expenses are $4 per book with the remaining selling expenses being fixed. The variable administrative expenses are 3% of sales with the remainder being fixed.  
The net operating income using the contribution approach for the first quarter is:

$300,000

$244,000

$214,600

$66,000

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 900,000 |
| **Cost of goods sold** |  | 630,000 |
| **Gross margin** |  | 270,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 104,000 | 204,000 |
| **Net operating income** |  | $ 66,000 |

On average, a book sells for $50. Variable selling expenses are $5 per book with the remaining selling expenses being fixed. The variable administrative expenses are 4% of sales with the remainder being fixed.  
The net operating income using the contribution approach for the first quarter is:

$270,000

$180,000

$144,000

$66,000

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 990,000 |
| **Cost of goods sold** |  | 675,000 |
| **Gross margin** |  | 315,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 109,000 |  |
| **Administrative** | 122,000 | 231,000 |
| **Net operating income** |  | $ 84,000 |

On average, a book sells for $60. Variable selling expenses are $6 per book with the remaining selling expenses being fixed. The variable administrative expenses are 5% of sales with the remainder being fixed.  
The cost formula for selling and administrative expenses with "X" equal to the number of books sold is:

Y = $133,500 + $6.00X

Y = $133,500 + $9.00X

Y = $82,500 + $9.00X

Y = $82,500 + $12.00X

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 900,000 |
| **Cost of goods sold** |  | 630,000 |
| **Gross margin** |  | 270,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 104,000 | 204,000 |
| **Net operating income** |  | $ 66,000 |

On average, a book sells for $50. Variable selling expenses are $5 per book with the remaining selling expenses being fixed. The variable administrative expenses are 4% of sales with the remainder being fixed.  
The cost formula for selling and administrative expenses with "X" equal to the number of books sold is:

Y = $102,000 + $5X

Y = $102,000 + $7X

Y = $78,000 + $7X

Y = $78,000 + $9X

1. An income statement for Sam's Bookstore for the first quarter of the year is presented below:

|  |  |  |
| --- | --- | --- |
| Sam's Bookstore | | |
| Income Statement | | |
| For Quarter Ended March 31 | | |
| **Sales** |  | $ 900,000 |
| **Cost of goods sold** |  | 630,000 |
| **Gross margin** |  | 270,000 |
| **Selling and administrative expenses** |  |  |
| **Selling** | $ 100,000 |  |
| **Administrative** | 104,000 | 204,000 |
| **Net operating income** |  | $ 66,000 |

On average, a book sells for $50. Variable selling expenses are $5 per book with the remaining selling expenses being fixed. The variable administrative expenses are 4% of sales with the remainder being fixed.  
If 20,000 books are sold during the second quarter and this activity is within the relevant range, the company's expected contribution margin would be:

$300,000

$160,000

$860,000

$58,000

1. Dominik Corporation purchased a machine 5 years ago for $527,000 when it launched product M08Y. Unfortunately, this machine has broken down and cannot be repaired. The machine could be replaced by a new model 310 machine costing $545,000 or by a new model 240 machine costing $450,000. Management has decided to buy the model 240 machine. It has less capacity than the model 310 machine, but its capacity is sufficient to continue making product M08Y. Management also considered, but rejected, the alternative of dropping product M08Y and not replacing the old machine. If that were done, the $450,000 invested in the new machine could instead have been invested in a project that would have returned a total of $532,000.  
   In making the decision to buy the model 240 machine rather than the model 310 machine, the differential cost was:

$95,000

$5,000

$77,000

$18,000

1. Dominik Corporation purchased a machine 5 years ago for $527,000 when it launched product M08Y. Unfortunately, this machine has broken down and cannot be repaired. The machine could be replaced by a new model 310 machine costing $545,000 or by a new model 240 machine costing $450,000. Management has decided to buy the model 240 machine. It has less capacity than the model 310 machine, but its capacity is sufficient to continue making product M08Y. Management also considered, but rejected, the alternative of dropping product M08Y and not replacing the old machine. If that were done, the $450,000 invested in the new machine could instead have been invested in a project that would have returned a total of $532,000.  
   In making the decision to buy the model 240 machine rather than the model 310 machine, the sunk cost was:

$545,000

$450,000

$527,000

$532,000

1. Dominik Corporation purchased a machine 5 years ago for $527,000 when it launched product M08Y. Unfortunately, this machine has broken down and cannot be repaired. The machine could be replaced by a new model 310 machine costing $545,000 or by a new model 240 machine costing $450,000. Management has decided to buy the model 240 machine. It has less capacity than the model 310 machine, but its capacity is sufficient to continue making product M08Y. Management also considered, but rejected, the alternative of dropping product M08Y and not replacing the old machine. If that were done, the $450,000 invested in the new machine could instead have been invested in a project that would have returned a total of $532,000.  
   In making the decision to invest in the model 240 machine, the opportunity cost was:

$545,000

$450,000

$532,000

$527,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $531,000 or a new model 220 machine costing $444,000 to replace a machine that was purchased 10 years ago for $477,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $444,000 in the new machine, the money could be invested in a project that would return a total of $458,000.  
   In making the decision to buy the model 220 machine rather than the model 370 machine, the sunk cost was:

$477,000

$444,000

$531,000

$458,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $360,000 or a new model 220 machine costing $340,000 to replace a machine that was purchased 7 years ago for $348,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $340,000 in the new machine, the money could be invested in a project that would return a total of $411,000.  
   In making the decision to buy the model 220 machine rather than the model 370 machine, the sunk cost was:

$348,000

$340,000

$360,000

$411,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $534,000 or a new model 220 machine costing $422,000 to replace a machine that was purchased 5 years ago for $473,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $422,000 in the new machine, the money could be invested in a project that would return a total of $61,000.  
   In making the decision to buy the model 220 machine rather than the model 370 machine, the differential cost was:

$112,000

$51,000

$61,000

$4,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $360,000 or a new model 220 machine costing $340,000 to replace a machine that was purchased 7 years ago for $348,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $340,000 in the new machine, the money could be invested in a project that would return a total of $411,000.  
   In making the decision to buy the model 220 machine rather than the model 370 machine, the differential cost was:

$20,000

$8,000

$12,000

$63,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $504,000 or a new model 220 machine costing $455,000 to replace a machine that was purchased 4 years ago for $479,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $455,000 in the new machine, the money could be invested in a project that would return a total of $491,000.  
   In making the decision to invest in the model 220 machine, the opportunity cost was:

$479,000

$455,000

$504,000

$491,000

1. Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing $360,000 or a new model 220 machine costing $340,000 to replace a machine that was purchased 7 years ago for $348,000. The old machine was used to make product I43L until it broke down last week. Unfortunately, the old machine cannot be repaired.  
   Management has decided to buy the new model 220 machine. It has less capacity than the new model 370 machine, but its capacity is sufficient to continue making product I43L.  
   Management also considered, but rejected, the alternative of simply dropping product I43L. If that were done, instead of investing $340,000 in the new machine, the money could be invested in a project that would return a total of $411,000.  
   In making the decision to invest in the model 220 machine, the opportunity cost was:

$348,000

$340,000

$360,000

$411,000

1. Bolka Corporation, a merchandising company, reported the following results for October:

|  |  |
| --- | --- |
| **Sales** | $ 419,000 |
| **Cost of goods sold (all variable)** | $ 175,500 |
| **Total variable selling expense** | $ 23,600 |
| **Total fixed selling expense** | $ 17,200 |
| **Total variable administrative expense** | $ 15,400 |
| **Total fixed administrative expense** | $ 31,400 |

The gross margin for October is:

$204,500

$243,500

$155,900

$370,400

1. Bolka Corporation, a merchandising company, reported the following results for October:

|  |  |
| --- | --- |
| **Sales** | $ 4,096,400 |
| **Cost of goods sold (all variable)** | $ 2,194,500 |
| **Total variable selling expense** | $ 238,700 |
| **Total fixed selling expense** | $ 144,700 |
| **Total variable administrative expense** | $ 238,700 |
| **Total fixed administrative expense** | $ 282,900 |

The gross margin for October is:

$1,424,500

$1,901,900

$996,900

$3,668,800

1. Bolka Corporation, a merchandising company, reported the following results for October:

|  |  |
| --- | --- |
| **Sales** | $ 500,000 |
| **Cost of goods sold (all variable)** | $ 170,700 |
| **Total variable selling expense** | $ 24,600 |
| **Total fixed selling expense** | $ 21,500 |
| **Total variable administrative expense** | $ 10,000 |
| **Total fixed administrative expense** | $ 34,900 |

The contribution margin for October is:

$294,700

$443,600

$329,300

$238,300

1. Bolka Corporation, a merchandising company, reported the following results for October:

|  |  |
| --- | --- |
| **Sales** | $ 4,096,400 |
| **Cost of goods sold (all variable)** | $ 2,194,500 |
| **Total variable selling expense** | $ 238,700 |
| **Total fixed selling expense** | $ 144,700 |
| **Total variable administrative expense** | $ 238,700 |
| **Total fixed administrative expense** | $ 282,900 |

The contribution margin for October is:

$1,424,500

$3,191,400

$1,901,900

$996,900

1. Streif Incorporated, a local retailer, has provided the following data for the month of June:

|  |  |
| --- | --- |
| **Merchandise inventory, beginning balance** | $ 46,000 |
| **Merchandise inventory, ending balance** | $ 52,000 |
| **Sales** | $ 260,000 |
| **Purchases of merchandise inventory** | $ 128,000 |
| **Selling expense** | $ 13,000 |
| **Administrative expense** | $ 40,000 |

The cost of goods sold for June was:

$128,000

$181,000

$122,000

$134,000

1. Streif Incorporated, a local retailer, has provided the following data for the month of June:

|  |  |
| --- | --- |
| **Merchandise inventory, beginning balance** | $ 46,000 |
| **Merchandise inventory, ending balance** | $ 52,000 |
| **Sales** | $ 260,000 |
| **Purchases of merchandise inventory** | $ 128,000 |
| **Selling expense** | $ 13,000 |
| **Administrative expense** | $ 40,000 |

The net operating income for June was:

$132,000

$126,000

$85,000

$79,000

1. Boersma Sales, Incorporated, a merchandising company, reported sales of 7,100 units in September at a selling price of $682 per unit. Cost of goods sold, which is a variable cost, was $317 per unit. Variable selling expenses were $44 per unit and variable administrative expenses were $22 per unit. The total fixed selling expenses were $157,200 and the total administrative expenses were $338,000.  
   The contribution margin for September was:

$3,878,400

$2,122,900

$2,591,500

$1,627,700

1. Boersma Sales, Incorporated, a merchandising company, reported sales of 7,100 units in September at a selling price of $682 per unit. Cost of goods sold, which is a variable cost, was $317 per unit. Variable selling expenses were $44 per unit and variable administrative expenses were $22 per unit. The total fixed selling expenses were $157,200 and the total administrative expenses were $338,000.  
   The gross margin for September was:

$2,122,900

$2,591,500

$1,627,700

$4,347,000

1. Delongis Corporation, a merchandising company, reported the following results for June:

|  |  |  |
| --- | --- | --- |
| **Number of units sold** | 1,200 | units |
| **Selling price per unit** | $ 221 | per unit |
| **Unit cost of goods sold** | $ 97 | per unit |
| **Variable selling expense per unit** | $ 12 | per unit |
| **Total fixed selling expense** | $ 7,300 |  |
| **Variable administrative expense per unit** | $ 8 | per unit |
| **Total fixed administrative expense** | $ 15,300 |  |

Cost of goods sold is a variable cost in this company.  
The gross margin for June is:

$242,600

$148,800

$124,800

$102,200

1. Delongis Corporation, a merchandising company, reported the following results for June:

|  |  |  |
| --- | --- | --- |
| **Number of units sold** | 1,200 | units |
| **Selling price per unit** | $ 221 | per unit |
| **Unit cost of goods sold** | $ 97 | per unit |
| **Variable selling expense per unit** | $ 12 | per unit |
| **Total fixed selling expense** | $ 7,300 |  |
| **Variable administrative expense per unit** | $ 8 | per unit |
| **Total fixed administrative expense** | $ 15,300 |  |

Cost of goods sold is a variable cost in this company.  
The contribution margin for June is:

$148,800

$102,200

$218,600

$124,800

1. Salomon Marketing, Incorporated, a merchandising company, reported sales of $1,555,500 and cost of goods sold of $1,025,100 for December. The company's total variable selling expense was $96,900; its total fixed selling expense was $34,300; its total variable administrative expense was $71,400; and its total fixed administrative expense was $100,100. The cost of goods sold in this company is a variable cost.  
   The contribution margin for December is:

$530,400

$227,700

$1,252,800

$362,100

1. Salomon Marketing, Incorporated a merchandising company, reported sales of $1,555,500 and cost of goods sold of $1,025,100 for December. The company's total variable selling expense was $96,900; its total fixed selling expense was $34,300; its total variable administrative expense was $71,400; and its total fixed administrative expense was $100,100. The cost of goods sold in this company is a variable cost.  
   The gross margin for December is:

$530,400

$227,700

$362,100

$1,421,100

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.**

1. A number of costs are listed below.

|  |  |
| --- | --- |
| **Cost Description** | **Cost Object** |
| **1. Wages of carpenters on a home building site** | A particular home |
| **2. Cost of wiring used in making a personal computer** | A particular personal computer |
| **3. Manager's salary at a hotel run by a chain of hotels** | A particular hotel guest |
| **4. Manager's salary at a hotel run by a chain of hotels** | The particular hotel |
| **5. Cost of aluminum mast installed in a yacht at a yacht manufacturer** | A particular yacht |
| **6. Monthly lease cost of X-ray equipment at a hospital** | The Radiology (X-Ray) Department |
| **7. Cost of screws used to secure wood trim in a yacht at a yacht manufacturer** | A particular yacht |
| **8. Cost of electronic navigation system installed in a yacht at a yacht manufacturer** | A particular yacht |
| **9. Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer** | The auto repair shop |
| **10. Cost of a measles vaccine administered at 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.

1. Dobosh Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | $ 3.65 |  |
| **Variable manufacturing overhead** | $ 1.60 |  |
| **Fixed manufacturing overhead** |  | $ 113,400 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.55 |  |
| **Fixed selling and administrative expense** |  | $ 36,450 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 9,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 9,000 units?
        3. If 10,000 units are sold, what is the variable cost per unit sold?
        4. If 10,000 units are sold, what is the total amount of variable costs related to the units sold?
        5. If 10,000 units are produced, what is the total amount of manufacturing overhead cost incurred?
        6. If the selling price is $21.60 per unit, what is the contribution margin per unit sold?
        7. If 8,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        8. If 8,000 units are produced, what is the total amount of indirect manufacturing costs incurred?
        9. What incremental manufacturing cost will the company incur if it increases production from 9,000 to 9,001 units?

1. Saxbury Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,600 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $5.50 |
| **Direct labor** | $3.65 |
| **Variable manufacturing overhead** | $1.80 |
| **Fixed manufacturing overhead** | $3.60 |
| **Fixed selling expense** | $0.80 |
| **Fixed administrative expense** | $0.65 |
| **Sales commissions** | $0.55 |
| **Variable administrative expense** | $0.55 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 5,600 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 5,600 units?
        3. If 6,600 units are sold, what is the variable cost per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        4. If 6,600 units are sold, what is the total amount of variable costs related to the units sold?
        5. If 6,600 units are produced, what is the average fixed manufacturing cost per unit produced? Note: Round "Per unit" answer to 2 decimal places.
        6. If 6,600 units are produced, what is the total amount of fixed manufacturing cost incurred?
        7. If 6,600 units are produced, what is the total amount of manufacturing overhead cost incurred? What is this total amount expressed on a per unit basis? Note: Round "Per unit" answer to 2 decimal places.
        8. If the selling price is $23.00 per unit, what is the contribution margin per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        9. If 4,600 units are produced, what is the total amount of direct manufacturing cost incurred?
        10. If 4,600 units are produced, what is the total amount of indirect manufacturing cost incurred?
        11. What incremental manufacturing cost will the company incur if it increases production from 5,600 to 5,601 units? Note: Round "Per unit" answer to 2 decimal places.

1. Saxbury Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $5.30 |
| **Direct labor** | $3.65 |
| **Variable manufacturing overhead** | $1.50 |
| **Fixed manufacturing overhead** | $3.90 |
| **Fixed selling expense** | $0.75 |
| **Fixed administrative expense** | $0.60 |
| **Sales commissions** | $0.50 |
| **Variable administrative expense** | $0.50 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 5,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 5,000 units?
        3. If 6,000 units are sold, what is the variable cost per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        4. If 6,000 units are sold, what is the total amount of variable costs related to the units sold?
        5. If 6,000 units are produced, what is the average fixed manufacturing cost per unit produced? Note: Round "Per unit" answer to 2 decimal places.
        6. If 6,000 units are produced, what is the total amount of fixed manufacturing cost incurred?
        7. If 6,000 units are produced, what is the total amount of manufacturing overhead cost incurred? What is this total amount expressed on a per unit basis? Note: Round "Per unit" answer to 2 decimal places.
        8. If the selling price is $22.90 per unit, what is the contribution margin per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        9. If 4,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        10. If 4,000 units are produced, what is the total amount of indirect manufacturing cost incurred?
        11. What incremental manufacturing cost will the company incur if it increases production from 5,000 to 5,001 units? Note: Round "Per unit" answer to 2 decimal places.

1. Myklebust Corporation's relevant range of activity is 4,000 units to 8,000 units. When it produces and sells 6,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $6.40 |
| **Direct labor** | $3.80 |
| **Variable manufacturing overhead** | $1.60 |
| **Fixed manufacturing overhead** | $3.00 |
| **Fixed selling expense** | $0.75 |
| **Fixed administrative expense** | $0.60 |
| **Sales commissions** | $1.50 |
| **Variable administrative expense** | $0.45 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 6,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 6,000 units?
        3. If the selling price is $20.20 per unit, what is the contribution margin per unit sold?
        4. If 7,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        5. If 7,000 units are produced, what is the total amount of indirect manufacturing cost incurred?
        6. What incremental manufacturing cost will the company incur if it increases production from 6,000 to 6,001 units?

1. Learned Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.30 |  |
| **Direct labor** | $ 3.75 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 36,000 |
| **Sales commissions** | $ 0.70 |  |
| **Variable administrative expense** | $ 0.60 |  |
| **Fixed selling and administrative expense** |  | $ 12,000 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 8,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 8,000 units?
        3. If the selling price is $22.80 per unit, what is the contribution margin per unit sold? Note: Round your answer to 2 decimal places.
        4. If 9,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        5. If 9,000 units are produced, what is the total amount of indirect manufacturing costs incurred?

1. Learned Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.20 |  |
| **Direct labor** | $ 3.85 |  |
| **Variable manufacturing overhead** | $ 1.35 |  |
| **Fixed manufacturing overhead** |  | $ 27,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 9,000 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 6,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 6,000 units?
        3. If the selling price is $22.40 per unit, what is the contribution margin per unit sold? Note: Round your answer to 2 decimal places.
        4. If 7,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        5. If 7,000 units are produced, what is the total amount of indirect manufacturing costs incurred?

1. Arman Corporation's relevant range of activity is 3,000 units to 7,000 units. When it produces and sells 5,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $6.10 |
| **Direct labor** | $2.90 |
| **Variable manufacturing overhead** | $1.25 |
| **Fixed manufacturing overhead** | $3.00 |
| **Fixed selling expense** | $1.05 |
| **Fixed administrative expense** | $0.60 |
| **Sales commissions** | $1.50 |
| **Variable administrative expense** | $0.55 |

**Required:**

* + - * 1. If 6,000 units are produced, what is the total amount of fixed manufacturing cost incurred?
        2. If 6,000 units are produced, what is the total amount of manufacturing overhead cost incurred? What is this total amount expressed on a per unit basis?
        3. If 4,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        4. If 4,000 units are produced, what is the total amount of indirect manufacturing cost incurred?

1. Skolnick Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.30 |  |
| **Direct labor** | $ 3.50 |  |
| **Variable manufacturing overhead** | $ 1.60 |  |
| **Fixed manufacturing overhead** |  | $ 150,000 |
| **Sales commissions** | $ 1.40 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 45,000 |

**Required:**

* + - * 1. If 10,000 units are produced, what is the total amount of direct manufacturing cost incurred? Note: Do not round intermediate calculations.
        2. If 10,000 units are produced, what is the total amount of indirect manufacturing costs incurred?

1. Skolnick Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 5.70 |  |
| **Direct labor** | $ 3.60 |  |
| **Variable manufacturing overhead** | $ 1.50 |  |
| **Fixed manufacturing overhead** |  | $ 121,500 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 36,450 |

**Required:**

* + - * 1. If 8,000 units are produced, what is the total amount of direct manufacturing cost incurred? Note: Do not round intermediate calculations.
        2. If 8,000 units are produced, what is the total amount of indirect manufacturing costs incurred?

1. Karpowicz Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.25 |
| **Direct labor** | $ 4.15 |
| **Variable manufacturing overhead** | $ 1.60 |
| **Fixed manufacturing overhead** | $ 12.60 |
| **Fixed selling expense** | $ 3.15 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |

**Required:**

* + - * 1. If the selling price is $21.40 per unit, what is the contribution margin per unit sold?
        2. If 8,000 units are produced, what is the total amount of direct manufacturing cost incurred?
        3. If 8,000 units are produced, what is the total amount of indirect manufacturing cost incurred?
        4. What incremental manufacturing cost will the company incur if it increases production from 9,000 to 9,001 units?

1. Parlavecchio Corporation's relevant range of activity is 2,000 units to 6,000 units. When it produces and sells 4,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $5.20 |
| **Direct labor** | $3.40 |
| **Variable manufacturing overhead** | $1.35 |
| **Fixed manufacturing overhead** | $3.00 |
| **Fixed selling expense** | $0.70 |
| **Fixed administrative expense** | $0.40 |
| **Sales commissions** | $1.50 |
| **Variable administrative expense** | $0.45 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 4,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 4,000 units?
        3. If 5,000 units are sold, what is the variable cost per unit sold?
        4. If 5,000 units are sold, what is the total amount of variable costs related to the units sold?
        5. If 5,000 units are produced, what is the average fixed manufacturing cost per unit produced?
        6. If 5,000 units are produced, what is the total amount of fixed manufacturing cost incurred?
        7. If 5,000 units are produced, what is the total amount of manufacturing overhead cost incurred? What is this total amount expressed on a per unit basis?

1. Menk Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.25 |  |
| **Direct labor** | $ 3.25 |  |
| **Variable manufacturing overhead** | $ 1.45 |  |
| **Fixed manufacturing overhead** |  | $ 18,000 |
| **Sales commissions** | $ 0.50 |  |
| **Variable administrative expense** | $ 0.40 |  |
| **Fixed selling and administrative expense** |  | $ 9,000 |

**Required:**

* + - * 1. If 5,000 units are sold, what is the variable cost per unit sold?
        2. If 5,000 units are sold, what is the total amount of variable costs related to the units sold?
        3. If 5,000 units are produced, what is the total amount of manufacturing overhead cost incurred?

1. A partial listing of costs incurred at Boylen Corporation during March appears below:

|  |  |
| --- | --- |
| **Direct materials** | $ 181,000 |
| **Utilities, factory** | $ 10,000 |
| **Sales commissions** | $ 69,000 |
| **Administrative salaries** | $ 99,000 |
| **Indirect labor** | $ 32,000 |
| **Advertising** | $ 75,000 |
| **Depreciation of production equipment** | $ 28,000 |
| **Direct labor** | $ 120,000 |
| **Depreciation of administrative equipment** | $ 49,000 |

**Required:**

* + - * 1. What is the total amount of product cost listed above? Show your work.
        2. What is the total amount of period cost listed above? Show your work.

1. Mary Tappin, an assistant Vice President at Galaxy Toys, was disturbed to find on her desk a memo from her boss, Gary Resnick, to the controller of the company. The memo appears below:  
   GALAXY TOYS INTERNAL MEMO  
   September 15  
   To: Harry Wilson, Controller  
   Fm: Gary Resnick, Executive Vice President  
   As you know, we won't start recording many sales until October when stores start accepting shipments from us for the Christmas season. Meanwhile, we are producing flat-out and are building up our finished goods inventories so that we will be ready to ship next month.  
   Unfortunately, we are in a bind right now since it looks like the net income for the quarter ending on September 30 is going to be pretty awful. This may get us in trouble with the bank since they always review the quarterly financial reports and may call in our loan if they don't like what they see. Is there any possibility that we could change the classification of some of our period costs to product costs-such as the rent on the finished goods warehouse?  
   Please let me know as soon as possible. The President is pushing for results.  
   Mary didn't know what to do about the memo. It wasn't intended for her, but its contents were alarming.  
   **Required:**
   * + - 1. Why has Gary Resnick suggested reclassifying some period costs as product costs?
         2. Why do you think Mary was alarmed about the memo?

1. Marquess Corporation has provided the following partial listing of costs incurred during May:

|  |  |
| --- | --- |
| **Marketing salaries** | $ 39,000 |
| **Property taxes, factory** | $ 8,000 |
| **Administrative travel** | $ 102,000 |
| **Sales commissions** | $ 73,000 |
| **Indirect labor** | $ 31,000 |
| **Direct materials** | $ 197,000 |
| **Advertising** | $ 145,000 |
| **Depreciation of production equipment** | $ 39,000 |
| **Direct labor** | $ 78,000 |

**Required:**

* + - * 1. What is the total amount of product cost listed above? Show your work.
        2. What is the total amount of period cost listed above? Show your work.

1. Classify the following costs for an auto manufacturer as either direct materials, direct labor, manufacturing overhead, or period costs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Direct Materials** | **Direct Labor** | **Manufacturing Overhead** | **Period Cost** |
| **a. Steel used in automobiles** |  |  |  |  |
| **b. Assembly department employee wages** |  |  |  |  |
| **c. Utility costs used in executive building** |  |  |  |  |
| **d. Travel costs of sales personnel** |  |  |  |  |
| **e. Cost of shipping goods to customers** |  |  |  |  |
| **f. Property taxes on assembly plant** |  |  |  |  |
| **g. Glass used in automobiles** |  |  |  |  |
| **h. Factory maintenance supplies** |  |  |  |  |
| **i. Depreciation on assembly plant** |  |  |  |  |
| **j. Plant manager's salary** |  |  |  |  |
| **k. CEO's salary** |  |  |  |  |
| **l. Depreciation on executive building** |  |  |  |  |
| **m. Salary of marketing executive** |  |  |  |  |
| **n. Tires installed on automobiles** |  |  |  |  |
| **o. Advertising** |  |  |  |  |

**Required:**Complete the answer sheet above by placing an "X" under each heading that identifies the cost involved.

1. Asplund Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.25 |  |
| **Direct labor** | $ 2.90 |  |
| **Variable manufacturing overhead** | $ 1.30 |  |
| **Fixed manufacturing overhead** |  | $ 18,000 |
| **Sales commissions** | $ 1.50 |  |
| **Variable administrative expense** | $ 0.45 |  |
| **Fixed selling and administrative expense** |  | $ 7,500 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 5,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 5,000 units?

1. Balerio Corporation's relevant range of activity is 10,000 units to 15,000 units. When it produces and sells 12,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 7.40 |
| **Direct labor** | $ 4.00 |
| **Variable manufacturing overhead** | $ 1.30 |
| **Fixed manufacturing overhead** | $ 14.20 |
| **Fixed selling expense** | $ 2.70 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.60 |
| **Variable administrative expense** | $ 0.50 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 12,000 units? Note: Do not round intermediate calculations.
        2. If 14,000 units are sold, what is the variable cost per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        3. If 14,000 units are sold, what is the total amount of variable costs related to the units sold? Note: Do not round intermediate calculations. Round "Per unit" answer to 2 decimal places.
        4. If the selling price is $19.00 per unit, what is the contribution margin per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        5. What incremental manufacturing cost will the company incur if it increases production from 12,000 to 12,001 units? Note: Round "Per unit" answer to 2 decimal places.

1. Balerio Corporation's relevant range of activity is 7,000 units to 11,000 units. When it produces and sells 9,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 6.80 |
| **Direct labor** | $ 3.20 |
| **Variable manufacturing overhead** | $ 1.60 |
| **Fixed manufacturing overhead** | $ 13.50 |
| **Fixed selling expense** | $ 2.25 |
| **Fixed administrative expense** | $ 1.80 |
| **Sales commissions** | $ 0.50 |
| **Variable administrative expense** | $ 0.40 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 9,000 units? Note: Do not round intermediate calculations.
        2. If 10,000 units are sold, what is the variable cost per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        3. If 10,000 units are sold, what is the total amount of variable costs related to the units sold? Note: Do not round intermediate calculations. Round "Per unit" answer to 2 decimal places.
        4. If the selling price is $18.20 per unit, what is the contribution margin per unit sold? Note: Round "Per unit" answer to 2 decimal places.
        5. What incremental manufacturing cost will the company incur if it increases production from 9,000 to 9,001 units? Note: Round "Per unit" answer to 2 decimal places.

1. Glisan Corporation's relevant range of activity is 4,000 units to 8,000 units. When it produces and sells 6,000 units, its average costs per unit are as follows:

|  |  |
| --- | --- |
|  | **Average Cost per Unit** |
| **Direct materials** | $ 5.75 |
| **Direct labor** | $ 3.00 |
| **Variable manufacturing overhead** | $ 1.60 |
| **Fixed manufacturing overhead** | $ 4.50 |
| **Fixed selling expense** | $ 0.75 |
| **Fixed administrative expense** | $ 0.60 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.55 |

**Required:**

* + - * 1. For financial reporting purposes, what is the total amount of product costs incurred to make 6,000 units?
        2. For financial reporting purposes, what is the total amount of period costs incurred to sell 6,000 units?
        3. If 5,000 units are sold, what is the total amount of variable costs related to the units sold?
        4. If the selling price is $19.10 per unit, what is the contribution margin per unit sold?
        5. What incremental manufacturing cost will the company incur if it increases production from 6,000 to 6,001 units?

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

|  |  |
| --- | --- |
| **Cost Description** | **Possible Measure of Activity** |
| **1. Salary of production manager at a surfboard manufacturer** | Surfboards produced |
| **2. Cost of solder used in making computers** | Computers produced |
| **3. Cost of dough used at a pizza shop** | Pizzas cooked |
| **4. Janitorial wages at a surfboard manufacturer** | Surfboards produced |
| **5. Salary of the controller at a hospital** | Number of patients |
| **6. Cost of sales at an electronics store** | Dollar sales |
| **7. Cost of testing materials used in a medical lab** | Tests run |
| **8. Cost of heating an electronics store** | Dollar sales |
| **9. Cost of electricity for production equipment at a surfboard manufacturer** | Surfboards produced |
| **10. Depreciation on shelving at a book 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.

1. At an activity level of 6,800 units, Henkes Corporation's total variable cost is $125,188 and its total fixed cost is $164,152.  
   **Required:**For the activity level of 7,100 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.

1. Hinrichs Corporation reports that at an activity level of 2,400 units, its total variable cost is $174,504 and its total fixed cost is $55,080.  
   **Required:**For the activity level of 2,700 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.

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

|  |  |
| --- | --- |
| **Cost Description** | **Possible Measure of Activity** |
| **1. Cost of vaccine used at a clinic** | Vaccines administered |
| **2. Building rent at a taco shop** | Dollar sales |
| **3. Salary of production manager at a snowboard manufacturer** | Snowboards produced |
| **4. Cost of electricity for production equipment at a snowboard manufacturer** | Snowboards produced |
| **5. Ferry captain's salary on a regularly scheduled passenger ferry** | Number of passengers |
| **6. Cost of glue used in furniture production** | Units produced |
| **7. Janitorial wages at a snowboard manufacturer** | Snowboards produced |
| **8. Depreciation on factory building at a snowboard manufacturer** | Snowboards produced |
| **9. Cost of advertising at a snowboard company** | Snowboards sold |
| **10. Cost of shipping bags of fertilizer to a customer at a chemical plant** | Bags shipped |

**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.

1. Morrisroe Corporation has provided the following information:

|  |  |  |
| --- | --- | --- |
|  | **Cost per Unit** | **Cost per Period** |
| **Direct materials** | $ 6.65 |  |
| **Direct labor** | $ 3.30 |  |
| **Variable manufacturing overhead** | $ 1.70 |  |
| **Fixed manufacturing overhead** |  | $ 10,000 |
| **Sales commissions** | $ 1.00 |  |
| **Variable administrative expense** | $ 0.50 |  |
| **Fixed selling and administrative expense** |  | $ 5,000 |

**Required:**

* + - * 1. If the selling price is $25.90 per unit, what is the contribution margin per unit sold?
        2. What incremental manufacturing cost will the company incur if it increases production from 5,000 to 5,001 units?

1. In April, Holderness Incorporated, a merchandising company, had sales of $311,000, selling expenses of $23,000, and administrative expenses of $34,000. The cost of merchandise purchased during the month was $173,000. The beginning balance in the merchandise inventory account was $43,000 and the ending balance was $57,000.  
   **Required:**Prepare a traditional format income statement for April.

1. In April, Holderness Incorporated, a merchandising company, had sales of $221,000, selling expenses of $14,000, and administrative expenses of $25,000. The cost of merchandise purchased during the month was $155,000. The beginning balance in the merchandise inventory account was $34,000 and the ending balance was $48,000.  
   **Required:**Prepare a traditional format income statement for April.

1. Fanelli Corporation, a merchandising company, reported the following results for July:

|  |  |
| --- | --- |
| **Number of units sold** | 5,600 |
| **Selling price per unit** | $ 610 |
| **Unit cost of goods sold** | $ 408 |
| **Variable selling expense per unit** | $ 62 |
| **Total fixed selling expense** | $ 125,100 |
| **Variable administrative expense per unit** | $ 32 |
| **Total fixed administrative expense** | $ 207,000 |

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

* + - * 1. Prepare a traditional format income statement for July.
        2. Prepare a contribution format income statement for July.

1. Fanelli Corporation, a merchandising company, reported the following results for July:

|  |  |
| --- | --- |
| **Number of units sold** | 5,300 |
| **Selling price per unit** | $ 590 |
| **Unit cost of goods sold** | $ 403 |
| **Variable selling expense per unit** | $ 58 |
| **Total fixed selling expense** | $ 124,400 |
| **Variable administrative expense per unit** | $ 22 |
| **Total fixed administrative expense** | $ 206,300 |

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

* + - * 1. Prepare a traditional format income statement for July.
        2. Prepare a contribution format income statement for July.

1. Weingartner Corporation, a merchandising company, reported sales of 4,800 units for July at a selling price of $269 per unit. The cost of goods sold (all variable) was $114 per unit and the variable selling expense was $6 per unit. The total fixed selling expense was $38,100. The variable administrative expense was $14 per unit and the total fixed administrative expense was $59,900.  
   **Required:**
   * + - 1. Prepare a contribution format income statement for July.
         2. Prepare a traditional format income statement for July.

1. Wippert Corporation, a merchandising company, reported the following results for December:

|  |  |
| --- | --- |
| **Sales** | $ 2,296,200 |
| **Cost of goods sold (all variable)** | $ 997,600 |
| **Total variable selling expense** | $ 86,000 |
| **Total fixed selling expense** | $ 57,100 |
| **Total variable administrative expense** | $ 43,000 |
| **Total fixed administrative expense** | $ 148,100 |

**Required:**

* + - * 1. Prepare a traditional format income statement for December.
        2. Prepare a contribution format income statement for December.

1. Bauman Sales Corporation, a merchandising company, reported total sales of $4,069,800 for November. The cost of goods sold (all variable) was $2,351,100, the total variable selling expense was $204,000, the total fixed selling expense was $117,700, the total variable administrative expense was $102,000, and the total fixed administrative expense was $267,000.  
   **Required:**
   * + - 1. Prepare a contribution format income statement for November.
         2. Prepare a traditional format income statement for November.

1. A number of costs are listed below.

|  |  |
| --- | --- |
| **Cost Description** | **Cost Object** |
| **1. Wages of carpenters on a home building site** | A particular home |
| **2. Cost of wiring used in making a personal computer** | A particular personal computer |
| **3. Manager's salary at a hotel run by a chain of hotels** | A particular hotel guest |
| **4. Manager's salary at a hotel run by a chain of hotels** | The particular hotel |
| **5. Cost of aluminum mast installed in a yacht at a yacht manufacturer** | A particular yacht |
| **6. Monthly lease cost of X-ray equipment at a hospital** | The Radiology (X-Ray) Department |
| **7. Cost of screws used to secure wood trim in a yacht at a yacht manufacturer** | A particular yacht |
| **8. Cost of electronic navigation system installed in a yacht at a yacht manufacturer** | A particular yacht |
| **9. Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer** | The auto repair shop |
| **10. Cost of a measles vaccine administered at 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.

1. A partial listing of costs incurred at Boylen Corporation during March appears below:

|  |  |
| --- | --- |
| **Direct materials** | $ 181,000 |
| **Utilities, factory** | $ 10,000 |
| **Sales commissions** | $ 69,000 |
| **Administrative salaries** | $ 99,000 |
| **Indirect labor** | $ 32,000 |
| **Advertising** | $ 75,000 |
| **Depreciation of production equipment** | $ 28,000 |
| **Direct labor** | $ 120,000 |
| **Depreciation of administrative equipment** | $ 49,000 |

**Required:**

* + - * 1. What is the total amount of product cost listed above?
        2. What is the total amount of period cost listed above?

1. Marquess Corporation has provided the following partial listing of costs incurred during May:

|  |  |
| --- | --- |
| **Marketing salaries** | $ 39,000 |
| **Property taxes, factory** | $ 8,000 |
| **Administrative travel** | $ 102,000 |
| **Sales commissions** | $ 73,000 |
| **Indirect labor** | $ 31,000 |
| **Direct materials** | $ 197,000 |
| **Advertising** | $ 145,000 |
| **Depreciation of production equipment** | $ 39,000 |
| **Direct labor** | $ 78,000 |

**Required:**

* + - * 1. What is the total amount of product cost listed above?
        2. What is the total amount of period cost listed above?

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

|  |  |
| --- | --- |
| **Cost Description** | **Possible Measure of Activity** |
| **1. Salary of production manager at a surfboard manufacturer** | Surfboards produced |
| **2. Cost of solder used in making computers** | Computers produced |
| **3. Cost of dough used at a pizza shop** | Pizzas cooked |
| **4. Janitorial wages at a surfboard manufacturer** | Surfboards produced |
| **5. Salary of the controller at a hospital** | Number of patients |
| **6. Cost of sales at an electronics store** | Dollar sales |
| **7. Cost of testing materials used in a medical lab** | Tests run |
| **8. Cost of heating an electronics store** | Dollar sales |
| **9. Cost of electricity for production equipment at a surfboard manufacturer** | Surfboards produced |
| **10. Depreciation on shelving at a book 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.

1. At an activity level of 6,800 units, Henkes Corporation's total variable cost is $125,188 and its total fixed cost is $164,152.  
   **Required:**For the activity level of 7,100 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.

1. Hinrichs Corporation reports that at an activity level of 2,400 units, its total variable cost is $174,504 and its total fixed cost is $55,080.  
   **Required:**For the activity level of 2,700 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.

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

|  |  |
| --- | --- |
| **Cost Description** | **Possible Measure of Activity** |
| **1. Cost of vaccine used at a clinic** | Vaccines administered |
| **2. Building rent at a taco shop** | Dollar sales |
| **3. Salary of production manager at a snowboard manufacturer** | Snowboards produced |
| **4. Cost of electricity for production equipment at a snowboard manufacturer** | Snowboards produced |
| **5. Ferry captain's salary on a regularly scheduled passenger ferry** | Number of passengers |
| **6. Cost of glue used in furniture production** | Units produced |
| **7. Janitorial wages at a snowboard manufacturer** | Snowboards produced |
| **8. Depreciation on factory building at a snowboard manufacturer** | Snowboards produced |
| **9. Cost of advertising at a snowboard company** | Snowboards sold |
| **10. Cost of shipping bags of fertilizer to a customer at a chemical plant** | Bags shipped |

**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.

**Answer Key**Test name: chapter 1

C

A

C

B

B

B

C

A

C

B

C

D

C

B

D

C

A

C

D

D

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A

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C

A

A

C

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D

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D

C

B

B

B

D

|  |  |
| --- | --- |
| **Direct materials** | $ 5.20 |
| **Direct labor** | 3.75 |
| **Direct manufacturing cost per unit (a)** | $ 8.95 |
| **Number of units produced (b)** | 6,000 |
| **Total direct manufacturing cost (a) × (b)** | $53,700 |

D

|  |  |
| --- | --- |
| **Direct materials** | $ 5.00 |
| **Direct labor** | 2.90 |
| **Direct manufacturing cost per unit (a)** | $ 7.90 |
| **Number of units produced (b)** | 4,000 |
| **Total direct manufacturing cost (a) × (b)** | $31,600 |

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 8,000 units)** | $ 12,800 |
| **Total fixed manufacturing overhead cost** | 121,500 |
| **Total indirect manufacturing cost** | $134,300 |

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.30 per unit × 6,000 units)** | $ 7,800 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 5,000 units\*Footnote asterisk)** | 15,000 |
| **Total indirect manufacturing cost** | $ 22,800 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 5,000 units.

A

Conversion cost = Direct labor + Manufacturing overhead = $36,000 + $30,200 = $66,200

C

Conversion cost = Direct labor + Manufacturing overhead = $13,000 + $46,000 = $59,000

A

Manufacturing overhead = 0.40 × Conversion cost  
Direct labor = $67,200  
Conversion cost = Direct labor + Manufacturing overhead  
Conversion cost = $67,200 + Manufacturing overhead  
Conversion cost = $67,200 + (0.40 × Conversion cost)  
0.60 × Conversion cost = $67,200  
Conversion cost = $67,200 ÷ 0.60 = $112,000  
Manufacturing overhead = 0.40 × Conversion cost  
Manufacturing overhead = 0.40 × $112,000 = $44,800

B

Manufacturing overhead = 0.60 × Conversion cost  
Direct labor = $52,000  
Conversion cost = Direct labor + Manufacturing overhead  
Conversion cost = $52,000 + Manufacturing overhead  
Conversion cost = $52,000 + (0.60 × Conversion cost)  
0.40 × Conversion cost = $52,000  
Conversion cost = $52,000 ÷ 0.40 = $130,000  
Manufacturing overhead = 0.60 × Conversion cost  
Manufacturing overhead = 0.60 × $130,000 = $78,000

D

Direct labor cost = $13,360  
Direct labor cost = 0.40 × Prime cost  
Total manufacturing cost = $74,200  
Direct labor cost = 0.40 × Prime cost  
Prime cost = Direct labor cost ÷ 0.40  
Prime cost = $13,360 ÷ 0.40 = $33,400  
Total manufacturing cost = Prime cost + Manufacturing overhead cost  
$74,200 = $33,400 + Manufacturing overhead cost  
Manufacturing overhead cost = $40,800

C

Direct labor cost = $10,000  
Direct labor cost = 0.40 × Prime cost  
Total manufacturing cost = $86,000  
Direct labor cost = 0.40 × Prime cost  
Prime cost = Direct labor cost ÷ 0.40  
Prime cost = $10,000 ÷ 0.40 = $25,000  
Total manufacturing cost = Prime cost + Manufacturing overhead cost  
$86,000 = $25,000 + Manufacturing overhead cost  
Manufacturing overhead cost = $61,000

B

Direct labor = 0.45 × Conversion cost  
Manufacturing overhead = $73,700  
Conversion cost = Direct labor + Manufacturing overhead  
Conversion cost = Direct labor + $73,700  
Conversion cost = (0.45 × Conversion cost) + $73,700  
0.55 × Conversion cost = $73,700  
Conversion cost = $73,700 ÷ 0.55  
Conversion cost = $134,000  
Direct labor = 0.45 × Conversion cost = 0.45 × $134,000 = $60,300

C

Direct labor = 0.60 × Conversion cost  
Manufacturing overhead = $54,000  
Conversion cost = Direct labor + Manufacturing overhead  
Conversion cost = Direct labor + $54,000  
Conversion cost = (0.60 × Conversion cost) + $54,000  
0.40 × Conversion cost = $54,000  
Conversion cost = $54,000 ÷ 0.40  
Conversion cost = $135,000  
Direct labor = 0.60 × Conversion cost = 0.60 × $135,000 = $81,000

C

Prime cost = Direct materials + Direct labor  
= $41,000 + $29,900 = $70,900

D

Prime cost = Direct materials + Direct labor  
= $33,000 + $13,000 = $46,000

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.65 per unit × 10,000 units)** | $ 16,500 |
| **Total fixed manufacturing overhead cost** | 121,500 |
| **Total manufacturing overhead cost** | $138,000 |

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost ($1.70 per unit × 9,400 units)** | $15,980 |
| **Total fixed manufacturing overhead cost ($3.40 per unit × 11,800 units\*Footnote asterisk)** | 40,120 |
| **Total manufacturing overhead cost** | $56,100 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 11,800 units.

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 4,000 units)** | $ 6,400 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 5,000 units\*Footnote asterisk)** | 15,000 |
| **Total manufacturing overhead cost** | $21,400 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 5,000 units.

D

Annual insurance expense = $3,090 ÷ 3 = $1,030  
Portion applicable to product cost = 0.90 × $1,030 = $927  
Portion applicable to period cost = 0.10 × $1,030 = $103

B

Annual insurance expense = $2,100 ÷ 3 = $700  
Portion applicable to product cost = 0.60 × $700 = $420  
Portion applicable to period cost = 0.40 × $700 = $280

D

|  |  |  |  |
| --- | --- | --- | --- |
| **Sales commissions** | | $ 0.50 | |
| **Variable administrative expense** | | 0.50 | |
| **Variable selling and administrative expense per unit** | | $ 1.00 | |
| **Total variable selling and administrative expense**  **($1.00 per unit × 9,000 units sold)** | | $ 9,000 | |
| **Total fixed selling and administrative expense** | | 40,500 | |
| **Total period (nonmanufacturing) cost** | | $ 49,500 | |

B

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 0.50 | |
| **Variable administrative expense** | 0.45 | |
| **Variable selling and administrative expense per unit** | $ 0.95 | |
| **Total variable selling and administrative expense**  **($0.95 per unit × 5,000 units sold)** | | $ 4,750 |
| **Total fixed selling and administrative expense**  **($0.90 per unit × 5,000 units + $0.60 per unit × 5,000 units)** | | 7,500 |
| **Total period (nonmanufacturing) cost** | | $ 12,250 |

B

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.20 | |
| **Direct labor** | 3.70 | |
| **Variable manufacturing overhead** | 1.25 | |
| **Variable manufacturing cost per unit** | $ 11.15 | |
| **Total variable manufacturing cost**  **($11.15 per unit × 5,000 units produced)** | | $ 55,750 |
| **Total fixed manufacturing overhead cost** | | 10,000 |
| **Total product (manufacturing) cost** | | $ 65,750 |

D

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.35 | |
| **Direct labor** | 4.10 | |
| **Variable manufacturing overhead** | 1.35 | |
| **Variable manufacturing cost per unit** | $ 11.80 | |
| **Total variable manufacturing cost**  **($11.80 per unit × 9,000 units produced)** | | $ 106,200 |
| **Total fixed manufacturing overhead cost**  **($13.50 per unit × 9,000 units produced)** | | 121,500 |
| **Total product (manufacturing) cost** | | $ 227,700 |

A

Variable cost per unit = $919,116 ÷ 9,900 units = $92.84 per unit  
Total cost = Total fixed cost + Total variable cost  
= $259,974 + ($92.84 per unit × 10,100 units)  
= $259,974 + $937,684  
= $1,197,658

A

Y = $5,300 + ($0.60 per unit × X)  
= $5,300 + ($0.60 per unit × 8,000 hours)  
= $5,300 + $4,800  
= $10,100

C

Variable cost per machine-hour = $732,480 ÷ 8,400 machine-hours = $87.20 per machine-hour  
Fixed cost per machine-hour at 8,800 machine-hours = $180,400 ÷ 8,800 machine-hours = $20.50 per machine-hour  
Total cost = Variable cost + Fixed cost  
= $87.20 per machine-hour + $20.50 per machine-hour  
= $107.70 per machine-hour

D

Variable cost per machine-hour = $556,416 ÷ 7,200 machine-hours = $77.28 per machine-hour  
Fixed cost per machine-hour at 7,300 machine-hours = $226,008 ÷ 7,300 machine-hours = $30.96 per machine-hour  
Total cost = Variable cost + Fixed cost  
= $77.28 per machine-hour + $30.96 per machine-hour  
= $108.24 per machine-hour

A

|  |  |
| --- | --- |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units\*Footnote asterisk) (a)** | $ 12,000 |
| **Number of units produced (b)** | 5,000 |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | $ 2.40 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.85 |
| **Direct labor** | 3.85 |
| **Variable manufacturing overhead** | 1.25 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.55 |
| **Variable cost per unit sold** | $ 13.50 |

C

Y = $16,000 + ($3.40 per unit × X)  
= $16,000 + ($3.40 per unit × 4,000 units)  
= $16,000 + $13,600  
= $29,600

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.70 per unit × 5,000 units)** | $ 8,500 |
| **Total fixed manufacturing overhead cost** | 25,200 |
| **Total manufacturing overhead cost** | $ 33,700 |

B

Y = $23,000 + ($8 per unit × 7,000 units)  
Y = $23,000 + $56,000  
Y = $79,000

B

Variable cost per unit = $697,284 ÷ 8,400 units = $83.01 per unit  
Total cost = Total fixed cost + Total variable cost  
= $464,100 + ($83.01 per unit × 8,500 units)  
= $464,100 + $705,585  
= $1,169,685

A

Direct materials per unit = $17,000 ÷ 10,000 units = $1.70 per unit  
Total direct materials cost in July = $1.70 per unit × 11,000 units = $18,700  
Fixed factory rent = $21,000 (given)  
Total cost = Direct materials + Fixed factory rent + Other production costs  
$61,300 = $18,700 + $21,000 + Other production costs  
Other production costs = $61,300 − ($18,700 + $21,000)  
= $61,300 − $39,700  
= $21,600

D

|  |  |
| --- | --- |
| **Direct materials** | $ 6.35 |
| **Direct labor** | 3.25 |
| **Variable manufacturing overhead** | 1.25 |
| **Sales commissions** | 1.15 |
| **Variable administrative expense** | 0.65 |
| **Variable cost per unit sold** | $ 12.65 |

D

|  |  |
| --- | --- |
| **Direct materials** | $ 6.45 |
| **Direct labor** | 3.30 |
| **Variable manufacturing overhead** | 1.25 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.50 |
| **Variable cost per unit sold** | $ 12.50 |

D

|  |  |
| --- | --- |
| **Fixed manufacturing overhead per unit** | $ 3.00 |
| **Number of units produced\*Footnote asterisk** | 4,750 |
| **Total fixed manufacturing overhead cost** | $ 14,250 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,750 units.

D

|  |  |
| --- | --- |
| **Fixed manufacturing overhead per unit** | $ 2.80 |
| **Number of units produced\*Footnote asterisk** | 4,000 |
| **Total fixed manufacturing overhead cost** | $ 11,200 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

A

Total cost = Total fixed cost + Total variable cost  
$32,000 = $14,000 + Total variable cost  
Total variable cost = $32,000 − $14,000 = $18,000  
Variable cost per unit = $18,000 ÷ 5,000 units = $3.60 per unit  
Total cost = Total fixed cost + Total variable cost  
= $14,000 + ($3.60 per unit × 6,000 units)  
= $14,000 + $21,600 = $35,600

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.10 |
| **Direct labor** | $ 3.45 |
| **Variable manufacturing overhead** | $ 1.75 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | $ 0.45 |
| **Variable cost per unit sold** | $ 13.25 |
| **Variable cost per unit sold (a)** | $ 13.25 |
| **Number of units sold (b)** | 6,000 |
| **Total variable costs (a) × (b)** | $ 79,500 |

B

|  |  |  |  |
| --- | --- | --- | --- |
|  | **July** | **August** | **Percentage Change** |
| **Sales in units** | 11,000 | 10,000 | −9.09% |
| **Selling and administrative expenses:** |  |  |  |
| **Rent** | 12,000 | 12,000 | 0.00% |
| **Sales commissions** | 13,200 | 12,000 | −9.09% |
| **Maintenance expenses** | 13,500 | 13,000 | −3.70% |
| **Clerical expense** | 16,000 | 15,000 | −6.25% |

Variable expenses are proportional to activity. In this case, sales commissions are the only selling and administrative expense that is proportional to unit sales.

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 26.40 |
| **Direct materials** | $ 6.65 |  |
| **Direct labor** | 3.40 |  |
| **Variable manufacturing overhead** | 1.15 |  |
| **Sales commissions** | 1.10 |  |
| **Variable administrative expense** | 0.45 |  |
| **Variable cost per unit sold** |  | 12.75 |
| **Contribution margin per unit** |  | $ 13.65 |

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 26.20 |
| **Direct materials** | $ 6.85 |  |
| **Direct labor** | 3.90 |  |
| **Variable manufacturing overhead** | 1.25 |  |
| **Sales commissions** | 1.00 |  |
| **Variable administrative expense** | 0.55 |  |
| **Variable cost per unit sold** |  | 13.55 |
| **Contribution margin per unit** |  | $ 12.65 |

D

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 26.50 |
| **Direct materials** | $ 4.95 |  |
| **Direct labor** | 3.40 |  |
| **Variable manufacturing overhead** | 1.40 |  |
| **Sales commissions** | 1.30 |  |
| **Variable administrative expense** | 0.80 |  |
| **Variable cost per unit sold** |  | 11.85 |
| **Contribution margin per unit** |  | $ 14.65 |

D

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 23.50 |
| **Direct materials** | $ 4.95 |  |
| **Direct labor** | 3.25 |  |
| **Variable manufacturing overhead** | 1.45 |  |
| **Sales commissions** | 1.00 |  |
| **Variable administrative expense** | 0.50 |  |
| **Variable cost per unit sold** |  | 11.15 |
| **Contribution margin per unit** |  | $ 12.35 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 7.35 |
| **Direct labor** | 3.55 |
| **Variable manufacturing overhead** | 1.40 |
| **Incremental manufacturing cost** | $ 12.30 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 7.10 |
| **Direct labor** | 3.95 |
| **Variable manufacturing overhead** | 1.75 |
| **Incremental manufacturing cost** | $ 12.80 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 6.20 |
| **Direct labor** | 3.30 |
| **Variable manufacturing overhead** | 1.90 |
| **Incremental manufacturing cost** | $ 11.40 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 6.05 |
| **Direct labor** | 3.05 |
| **Variable manufacturing overhead** | 1.70 |
| **Incremental manufacturing cost** | $ 10.80 |

C

Cost of goods sold = Beginning merchandise inventory + Purchases − Ending merchandise inventory  
$69,800 = $12,900 + Purchases − $22,800  
Purchases = $69,800 − $12,900 + $22,800 = $79,700

B

Cost of goods sold = Beginning merchandise inventory + Purchases − Ending merchandise inventory  
$84,000 = $20,000 + Purchases − $18,000  
Purchases = $84,000 − $20,000 + $18,000 = $82,000

D

Cost of goods sold = Beginning merchandise inventory + Purchases − Ending merchandise inventory = $13,000 + $63,000 − $15,000 = $61,000

B

Direct costs of the Cosmetics Department = Cosmetics Department sales commissions + Cosmetics Department cost of sales + Cosmetics Department manager's salary = $5,180 + $33,500 + $4,080 = $42,760

B

Direct costs of the Cosmetics Department = Cosmetics Department sales commissions + Cosmetics Department cost of sales + Cosmetics Department manager's salary = $4,000 + $37,000 + $4,000 = $45,000

A

Costs that are not direct costs of the Northridge Store = Corporate headquarters building lease + Corporate legal office salaries + Central warehouse lease cost = $78,200 + $58,200 + $12,300 = $148,700

A

Costs that are not direct costs of the Northridge Store = Corporate headquarters building lease + Corporate legal office salaries + Central warehouse lease cost = $77,000 + $59,000 + $16,000 = $152,000

B

Direct costs of the Shoe Department = Shoe Department cost of sales + Shoe Department sales commissions + Shoe Department manager's salary = $66,000 + $5,000 + $3,000 = $74,000

C

Costs that are not direct costs of the Brentwood Store = Corporate legal office salaries + Corporate headquarters building lease + Central warehouse lease cost = $68,000 + $86,000 + $3,000 = $157,000

A

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 7.10 | |
| **Direct labor** | 3.30 | |
| **Variable manufacturing overhead** | 1.90 | |
| **Variable manufacturing cost per unit** | $ 12.30 | |
| **Total variable manufacturing cost**  **($12.30 per unit × 5,750 units produced)** | | $ 70,725 |
| **Total fixed manufacturing overhead cost**  **($3.60 per unit × 5,750 units produced)** | | 20,700 |
| **Total product (manufacturing) cost** | | $ 91,425 |

A

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.55 | |
| **Direct labor** | 3.50 | |
| **Variable manufacturing overhead** | 1.40 | |
| **Variable manufacturing cost per unit** | $ 11.45 | |
| **Total variable manufacturing cost**  **($11.45 per unit × 4,000 units produced)** | | $ 45,800 |
| **Total fixed manufacturing overhead cost**  **($2.60 per unit × 4,000 units produced)** | | 10,400 |
| **Total product (manufacturing) cost** | | $ 56,200 |

D

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 1.50 | |
| **Variable administrative expense** | 0.45 | |
| **Variable selling and administrative expense per unit** | $ 1.95 | |
| **Total variable selling and administrative expense**  **($1.95 per unit × 4,000 units sold)** | | $ 7,800 |
| **Total fixed selling and administrative expense**  **($0.70 per unit × 4,000 units + $0.40 per unit × 4,000 units)** | | 4,400 |
| **Total period (nonmanufacturing) cost** | | $ 12,200 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 7.00 |
| **Direct labor** | 3.10 |
| **Direct manufacturing cost per unit (a)** | $ 10.10 |
| **Number of units produced (b)** | 3,800 |
| **Total direct manufacturing cost (a) × (b)** | $ 38,380 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.55 |
| **Direct labor** | 3.50 |
| **Direct manufacturing cost per unit (a)** | $ 10.05 |
| **Number of units produced (b)** | 3,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 30,150 |

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.95 per unit × 5,000 units)** | $ 9,750 |
| **Total fixed manufacturing overhead cost**  **($3.20 per unit × 6,000 units\*Footnote asterisk)** | 19,200 |
| **Total indirect manufacturing cost** | $ 28,950 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 6,000 units.

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.40 per unit × 3,000 units)** | $ 4,200 |
| **Total fixed manufacturing overhead cost**  **($2.60 per unit × 4,000 units\*Footnote asterisk)** | 10,400 |
| **Total indirect manufacturing cost** | $ 14,600 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

D

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.00 | |
| **Direct labor** | 3.35 | |
| **Variable manufacturing overhead** | 1.75 | |
| **Variable manufacturing cost per unit** | $ 11.10 | |
| **Total variable manufacturing cost**  **($11.10 per unit × 4,000 units produced)** | | $ 44,400 |
| **Total fixed manufacturing overhead cost** | | 8,800 |
| **Total product (manufacturing) cost** | | $ 53,200 |

B

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 1.00 | |
| **Variable administrative expense** | 0.40 | |
| **Variable selling and administrative expense per unit** | $ 1.40 | |
| **Total variable selling and administrative expense**  **($1.40 per unit × 4,000 units sold)** | | $ 5,600 | |
| **Total fixed selling and administrative expense** | | 4,000 | |
| **Total period (nonmanufacturing) cost** | | $ 9,600 | |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.00 |
| **Direct labor** | 3.35 |
| **Direct manufacturing cost per unit (a)** | $ 9.35 |
| **Number of units produced (b)** | 3,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 28,050 |

D

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.75 per unit × 3,000 units)** | $ 5,250 |
| **Total fixed manufacturing overhead cost** | 8,800 |
| **Total indirect manufacturing cost** | $ 14,050 |

A

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 7.05 | |
| **Direct labor** | 3.50 | |
| **Variable manufacturing overhead** | 1.65 | |
| **Variable manufacturing cost per unit** | $ 12.20 | |
| **Total variable manufacturing cost**  **($12.20 per unit × 5,000 units produced)** | | $ 61,000 |
| **Total fixed manufacturing overhead cost** | | 11,000 |
| **Total product (manufacturing) cost** | | $ 72,000 |

A

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 1.00 | |
| **Variable administrative expense** | 0.40 | |
| **Variable selling and administrative expense per unit** | $ 1.40 | |
| **Total variable selling and administrative expense**  **($1.40 per unit × 5,000 units sold)** | | $ 7,000 |
| **Total fixed selling and administrative expense** | | 5,500 |
| **Total period (nonmanufacturing) cost** | | $ 12,500 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 7.05 |
| **Direct labor** | 3.50 |
| **Variable manufacturing overhead** | 1.65 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.40 |
| **Variable cost per unit sold** | $ 13.60 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 7.05 |
| **Direct labor** | 3.50 |
| **Variable manufacturing overhead** | 1.65 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.40 |
| **Variable cost per unit sold** | $ 13.60 |
| **Variable cost per unit sold (a)** | $ 13.60 |
| **Number of units sold (b)** | 4,000 |
| **Total variable costs (a) × (b)** | $ 54,400 |

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.95 per unit × 9,000 units)** | $ 17,550 |
| **Total fixed manufacturing overhead cost** | 19,000 |
| **Total manufacturing overhead cost** | $ 36,550 |

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.65 per unit × 4,000 units)** | $ 6,600 |
| **Total fixed manufacturing overhead cost** | 11,000 |
| **Total manufacturing overhead cost** | $ 17,600 |

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 18.70 |
| **Direct materials** | $ 7.05 |  |
| **Direct labor** | 3.50 |  |
| **Variable manufacturing overhead** | 1.65 |  |
| **Sales commissions** | 1.00 |  |
| **Variable administrative expense** | 0.40 |  |
| **Variable cost per unit sold** |  | 13.60 |
| **Contribution margin per unit** |  | $ 5.10 |

D

|  |  |
| --- | --- |
| **Direct materials** | $ 7.05 |
| **Direct labor** | 3.50 |
| **Direct manufacturing cost per unit (a)** | $ 10.55 |
| **Number of units produced (b)** | 6,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 63,300 |

D

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.65 per unit × 6,000 units)** | $ 9,900 |
| **Total fixed manufacturing overhead cost** | 11,000 |
| **Total indirect manufacturing cost** | $ 20,900 |

D

|  |  |
| --- | --- |
| **Direct materials** | $ 7.05 |
| **Direct labor** | 3.50 |
| **Variable manufacturing overhead** | 1.65 |
| **Incremental manufacturing cost** | $ 12.20 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 4.90 |
| **Direct labor** | 2.95 |
| **Direct manufacturing cost per unit (a)** | $ 7.85 |
| **Number of units produced (b)** | 3,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 23,550 |

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.25 per unit × 3,000 units)** | $ 3,750 |
| **Total fixed manufacturing overhead cost** | 8,000 |
| **Total indirect manufacturing cost** | $ 11,750 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.30 |
| **Direct labor** | 3.65 |
| **Direct manufacturing cost per unit (a)** | $ 9.95 |
| **Number of units produced (b)** | 8,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 79,600 |

D

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.75 per unit × 8,000 units)** | $ 14,000 |
| **Total fixed manufacturing overhead cost**  **($9.90 per unit × 9,000 units\*Footnote asterisk)** | 89,100 |
| **Total indirect manufacturing cost** | $ 103,100 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 9,000 units.

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.35 per unit × 4,000 units)** | $ 5,400 |
| **Total fixed manufacturing overhead cost** | 14,000 |
| **Total manufacturing overhead cost** | $ 19,400 |

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 21.90 |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | 3.10 |  |
| **Variable manufacturing overhead** | 1.35 |  |
| **Sales commissions** | 1.50 |  |
| **Variable administrative expense** | 0.40 |  |
| **Variable cost per unit sold** |  | 12.55 |
| **Contribution margin per unit** |  | $ 9.35 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.20 |
| **Direct labor** | 3.10 |
| **Direct manufacturing cost per unit (a)** | $ 9.30 |
| **Number of units produced (b)** | 6,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 55,800 |

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.40 per unit × 5,500 units)** | $ 7,700 |
| **Total fixed manufacturing overhead cost** | 13,200 |
| **Total indirect manufacturing cost** | $ 20,900 |

C

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.35 per unit × 6,000 units)** | $ 8,100 |
| **Total fixed manufacturing overhead cost** | 14,000 |
| **Total indirect manufacturing cost** | $ 22,100 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.70 |
| **Direct labor** | 3.30 |
| **Variable manufacturing overhead** | 1.65 |
| **Incremental manufacturing cost** | $ 11.65 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 6.20 |
| **Direct labor** | 3.10 |
| **Variable manufacturing overhead** | 1.35 |
| **Incremental manufacturing cost** | $ 10.65 |

C

Direct costs include the cost of clay used in production and the wages paid to the workers who paint the figurines. $64,000 + $93,000 = $157,000

C

Direct costs include the cost of clay used in production and the wages paid to the workers who paint the figurines.  
$65,000 + $90,000 = $155,000

C

Product costs include the cost of clay used in production and the wages paid to the workers who paint the figurines. $81,000 + $89,000 = $170,000

C

Product costs include the cost of clay used in production and the wages paid to the workers who paint the figurines. $65,000 + $90,000 = $155,000

C

Conversion costs include only the wages paid to the workers who paint the figurines.

C

Conversion costs include only the wages paid to the workers who paint the figurines.

B

Manufacturing overhead includes: Utilities, factory; Indirect labor; and Depreciation of production equipment. $5,000 + $25,000 + $20,000 = $50,000

A

Product costs include: Direct materials; Utilities, factory; Indirect labor; Depreciation of production equipment; and Direct labor. $113,000 + $5,000 + $25,000 + $20,000 + $129,000 = $292,000

A

Period costs include: Administrative salaries; Sales commissions; Depreciation of administrative equipment; and Advertising. $81,000 + $48,000 + $30,000 + $135,000 = $294,000

D

Period costs include administrative wages and salaries, sales staff salaries, corporate headquarters building rent, and marketing. $85,000 + $30,000 + $43,000 + $65,000 = $223,000

A

Manufacturing overhead costs include factory supplies, factory depreciation, and indirect labor. $9,000 + $33,000 + $26,000 = $68,000

C

Product costs include factory supplies, direct materials, factory depreciation, indirect labor, and direct labor. $9,000 + $126,000 + $33,000 + $26,000 + $99,000 = $293,000

D

|  |  |
| --- | --- |
| **Total fixed manufacturing overhead cost**  **($13.50 per unit × 9,000 units\*Footnote asterisk) (a)** | $ 121,500 |
| **Number of units produced (b)** | 10,000 |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | $ 12.15 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 9,000 units.

B

|  |  |
| --- | --- |
| **Fixed manufacturing overhead per unit** | $ 13.50 |
| **Number of units produced\*Footnote asterisk** | 9,000 |
| **Total fixed manufacturing overhead cost** | $ 121,500 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 9,000 units.

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.30 per unit × 10,000 units)** | $ 13,000 |
| **Total fixed manufacturing overhead cost**  **($13.50 per unit × 9,000 units\*Footnote asterisk)** | 121,500 |
| **Total manufacturing overhead cost** | $ 134,500 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 9,000 units.

D

|  |  |
| --- | --- |
| **Direct materials** | $ 5.40 |
| **Direct labor** | 3.55 |
| **Variable manufacturing overhead** | 1.70 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.40 |
| **Variable cost per unit sold** | $ 12.05 |

D

|  |  |
| --- | --- |
| **Direct materials** | $ 5.40 |
| **Direct labor** | 3.55 |
| **Variable manufacturing overhead** | 1.70 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.40 |
| **Variable cost per unit sold** | $ 12.05 |
| **Variable cost per unit sold (a)** | $ 12.05 |
| **Number of units sold (b)** | 5,000 |
| **Total variable costs (a) × (b)** | $ 60,250 |

B

|  |  |
| --- | --- |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units\*Footnote asterisk) (a)** | $ 12,000 |
| **Number of units produced (b)** | 5,000 |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | $ 2.40 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

C

|  |  |
| --- | --- |
| **Fixed manufacturing overhead per unit** | $ 3.00 |
| **Number of units produced\*Footnote asterisk** | 4,000 |
| **Total fixed manufacturing overhead cost** | $ 12,000 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

A

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.70 per unit × 5,000 units)** | $ 8,500 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units\*Footnote asterisk)** | 12,000 |
| **Total manufacturing overhead cost** | $ 20,500 |

\*Footnote asteriskThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,000 units.

B

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.45 per unit × 5,000 units)** | $ 7,250 |
| **Total fixed manufacturing overhead cost** | 12,000 |
| **Total manufacturing overhead cost** | $ 19,250 |

D

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 25.00 |
| **Direct materials** | $ 6.20 |  |
| **Direct labor** | 2.80 |  |
| **Variable manufacturing overhead** | 1.45 |  |
| **Sales commissions** | 1.00 |  |
| **Variable administrative expense** | 0.55 |  |
| **Variable cost per unit sold** |  | 12.00 |
| **Contribution margin per unit** |  | $ 13.00 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.20 |
| **Direct labor** | 2.80 |
| **Variable manufacturing overhead** | 1.45 |
| **Incremental manufacturing cost** | $ 10.45 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.35 |
| **Direct labor** | 3.75 |
| **Variable manufacturing overhead** | 1.50 |
| **Sales commissions** | 0.50 |
| **Variable administrative expense** | 0.55 |
| **Variable cost per unit sold** | $ 12.65 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.60 |
| **Direct labor** | 3.60 |
| **Variable manufacturing overhead** | 1.40 |
| **Sales commissions** | 0.60 |
| **Variable administrative expense** | 0.65 |
| **Variable cost per unit sold** | $ 12.85 |
| **Variable cost per unit sold (a)** | $ 12.85 |
| **Number of units sold (b)** | 6,500 |
| **Total variable costs (a) × (b)** | $ 83,525 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.35 |
| **Direct labor** | 3.75 |
| **Variable manufacturing overhead** | 1.50 |
| **Sales commissions** | 0.50 |
| **Variable administrative expense** | 0.55 |
| **Variable cost per unit sold** | $ 12.65 |
| **Variable cost per unit sold (a)** | $ 12.65 |
| **Number of units sold (b)** | 4,000 |
| **Total variable costs (a) × (b)** | $ 50,600 |

A

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.25 per unit × 5,000 units)** | $ 6,250 |
| **Total fixed manufacturing overhead cost** | 16,500 |
| **Total manufacturing overhead cost** | $ 22,750 |

A

|  |  |
| --- | --- |
| **Total variable manufacturing overhead cost**  **($1.50 per unit × 4,000 units)** | $ 6,000 |
| **Total fixed manufacturing overhead cost** | 15,000 |
| **Total manufacturing overhead cost** | $ 21,000 |

C

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 20.30 |
| **Direct materials** | $ 6.45 |  |
| **Direct labor** | 3.30 |  |
| **Variable manufacturing overhead** | 1.25 |  |
| **Sales commissions** | 0.45 |  |
| **Variable administrative expense** | 0.50 |  |
| **Variable cost per unit sold** |  | 11.95 |
| **Contribution margin per unit** |  | $ 8.35 |

C

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 20.60 |
| **Direct materials** | $ 6.35 |  |
| **Direct labor** | 3.75 |  |
| **Variable manufacturing overhead** | 1.50 |  |
| **Sales commissions** | 0.50 |  |
| **Variable administrative expense** | 0.55 |  |
| **Variable cost per unit sold** |  | 12.65 |
| **Contribution margin per unit** |  | $ 7.95 |

C

Conversion cost = Direct labor + Manufacturing overhead = $54,000 + $82,000 = $136,000

C

Prime cost = Direct materials + Direct labor = $51,000 + $54,000 = $105,000

C

Conversion cost = Direct labor + Manufacturing overhead = $25,000 + $62,000 = $87,000

C

Prime cost = Direct materials + Direct labor = $42,000 + $25,000 = $67,000

B

|  |  |
| --- | --- |
| **Direct materials** | $ 6.60 |
| **Direct labor** | 3.65 |
| **Variable manufacturing overhead** | 1.65 |
| **Sales commissions** | 0.50 |
| **Variable administrative expense** | 0.45 |
| **Variable cost per unit sold** | $ 12.85 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.60 |
| **Direct labor** | 3.65 |
| **Variable manufacturing overhead** | 1.65 |
| **Sales commissions** | 0.50 |
| **Variable administrative expense** | 0.45 |
| **Variable cost per unit sold** | $ 12.85 |
| **Variable cost per unit sold (a)** | $ 12.85 |
| **Number of units sold (b)** | 4,000 |
| **Total variable costs (a) × (b)** | $ 51,400 |

B

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 5.95 | |
| **Direct labor** | 3.30 | |
| **Variable manufacturing overhead** | 1.60 | |
| **Variable manufacturing cost per unit** | $ 10.85 | |
| **Total variable manufacturing cost**  **($10.85 per unit × 4,000 units produced)** | | $ 43,400 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units produced)** | | 12,000 |
| **Total product (manufacturing) cost** | | $ 55,400 |

B

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 1.50 | |
| **Variable administrative expense** | 0.50 | |
| **Variable selling and administrative expense per unit** | $ 2.00 | |
| **Total variable selling and administrative expense**  **($2.00 per unit × 4,000 units sold)** | | $ 8,000 |
| **Total fixed selling and administrative expense**  **($0.50 per unit × 4,000 units + $0.40 per unit × 4,000 units)** | | 3,600 |
| **Total period (nonmanufacturing) cost** | | $ 11,600 |

A

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 4.85 | |
| **Direct labor** | 3.35 | |
| **Variable manufacturing overhead** | 1.35 | |
| **Variable manufacturing cost per unit** | $ 9.55 | |
| **Total variable manufacturing cost**  **($9.55 per unit × 4,000 units produced)** | | $ 38,200 |
| **Total fixed manufacturing overhead cost** | | 8,000 |
| **Total product (manufacturing) cost** | | $ 46,200 |

A

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 2.20 | |
| **Variable administrative expense** | 0.50 | |
| **Variable selling and administrative expense per unit** | $ 2.70 | |
| **Total variable selling and administrative expense**  **($2.70 per unit × 6,500 units sold)** | | $ 17,550 |
| **Total fixed selling and administrative expense** | | 6,000 |
| **Total period (nonmanufacturing) cost** | | $ 23,550 |

A

|  |  |  |  |
| --- | --- | --- | --- |
| **Sales commissions** | | $ 1.50 | |
| **Variable administrative expense** | | 0.45 | |
| **Variable selling and administrative expense per unit** | | $ 1.95 | |
| **Total variable selling and administrative expense**  **($1.95 per unit × 4,000 units sold)** | | $ 7,800 | |
| **Total fixed selling and administrative expense** | | 4,400 | |
| **Total period (nonmanufacturing) cost** | | $ 12,200 | |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 4.50 |
| **Direct labor** | 3.20 |
| **Variable manufacturing overhead** | 1.20 |
| **Sales commissions** | 1.20 |
| **Variable administrative expense** | 0.30 |
| **Variable cost per unit sold** | $ 10.40 |

B

|  |  |
| --- | --- |
| **Direct materials** | $ 4.85 |
| **Direct labor** | 3.35 |
| **Variable manufacturing overhead** | 1.35 |
| **Sales commissions** | 1.50 |
| **Variable administrative expense** | 0.45 |
| **Variable cost per unit sold** | $ 11.50 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 5.40 |
| **Direct labor** | 4.20 |
| **Variable manufacturing overhead** | 1.55 |
| **Sales commissions** | 2.10 |
| **Variable administrative expense** | 0.45 |
| **Variable cost per unit sold** | $ 13.70 |
| **Variable cost per unit sold (a)** | $ 13.70 |
| **Number of units sold (b)** | 6,000 |
| **Total variable costs (a) × (b)** | $ 82,200 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 4.85 |
| **Direct labor** | 3.35 |
| **Variable manufacturing overhead** | 1.35 |
| **Sales commissions** | 1.50 |
| **Variable administrative expense** | 0.45 |
| **Variable cost per unit sold** | $ 11.50 |
| **Variable cost per unit sold (a)** | $ 11.50 |
| **Number of units sold (b)** | 5,000 |
| **Total variable costs (a) × (b)** | $ 57,500 |

B

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.60 | |
| **Direct labor** | 3.85 | |
| **Variable manufacturing overhead** | 1.50 | |
| **Variable manufacturing cost per unit** | $ 11.95 | |
| **Total variable manufacturing cost**  **($11.95 per unit × 9,000 units produced)** | | $ 107,550 |
| **Total fixed manufacturing overhead cost** | | 81,000 |
| **Total product (manufacturing) cost** | | $ 188,550 |

C

|  |  |  |
| --- | --- | --- |
| **Sales commissions** | $ 0.50 | |
| **Variable administrative expense** | 0.50 | |
| **Variable selling and administrative expense per unit** | $ 1.00 | |
| **Total variable selling and administrative expense**  **($1.00 per unit × 9,000 units produced)** | | $ 9,000 |
| **Total fixed selling and administrative expense** | | 44,550 |
| **Total period (nonmanufacturing) cost** | | $ 53,550 |

D

B

D

C

A

B

$733,400; A fixed cost is constant in total within the relevant range.

B

Average property tax per unit = Total property tax ÷ Unit sales = $733,400 ÷ 37,300 units = $19.66 per unit.

D

Helpline cost per unit = Total helpline costs ÷ Number of calls  
= $452,500 ÷ 25,000 calls  
= $18.10 per call  
Total helpline cost = Helpline cost per unit × Number of calls  
= $18.10 per call × 23,900 calls = $432,590

D

Helpline cost per unit = Total helpline costs ÷ Number of calls  
= $452,500 ÷ 25,000 calls = $18.10 per call  
The average helpline cost per call is constant within the relevant range.

C

B

A

D

C

Sales commission per unit = Total sales commissions ÷ Unit sales = $576,700 ÷ 36,500 = $15.80  
Total sales commission = Sales commission per unit × Unit sales = $15.80 × 35,000 = $553,000

C

Sales commission per unit = Total sales commissions ÷ Unit sales = $132,000 ÷ 20,000 = $6.60  
Total sales commission = Sales commission per unit × Unit sales = $6.60 × 18,400 = $121,440

A

Sales commission per unit = Total sales commissions ÷ Unit sales = $585,200 ÷ 44,000 = $13.30  
The average sales commission per unit is constant within the relevant range.

A

Sales commission per unit = Total sales commissions ÷ Unit sales = $132,000 ÷ 20,000 = $6.60  
The average sales commission per unit is constant within the relevant range.

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.25 |
| **Direct labor** | 2.80 |
| **Variable manufacturing overhead** | 1.55 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.50 |
| **Variable cost per unit sold** | $ 12.10 |

C

|  |  |
| --- | --- |
| **Direct materials** | $ 6.25 |
| **Direct labor** | 2.80 |
| **Variable manufacturing overhead** | 1.55 |
| **Sales commissions** | 1.00 |
| **Variable administrative expense** | 0.50 |
| **Variable cost per unit sold** | $ 12.10 |
| **Variable cost per unit sold (a)** | $ 12.10 |
| **Number of units sold (b)** | 5,000 |
| **Total variable costs (a) × (b)** | $ 60,500 |

B

$697,200; A fixed cost is constant in total within the relevant range.

D

Average lease cost per unit = Total lease cost ÷ Unit sales  
= $697,200 ÷ 26,400 units  
= $26.41 per unit

A

Variable cost per unit = Total variable cost ÷ Total activity  
= $131,750 ÷ 5,000 units  
= $26.35 per unit  
Total variable cost = Variable cost per unit × Total activity  
= $26.35 per unit × 5,200 units  
= $137,020

B

Average fixed cost per unit = Total fixed cost ÷ Total activity  
= $31,200 ÷ 5,200 units  
= $6.00 per unit

B

Variable maintenance cost per unit = Total variable maintenance cost ÷ Total activity  
= $390,240 ÷ 9,000 machine-hours  
Total variable maintenance cost = Variable maintenance cost per unit × Total activity  
= $43.36 per machine-hour × 9,300 machine-hours  
 = $403,248

C

Average fixed maintenance cost = Total fixed maintenance cost ÷ Total activity = $368,280 ÷ 9,300 machine-hours = $39.60 per machine-hour

C

Variable cost per unit = Total variable cost ÷ Units = $60,000 ÷ 40,000 = $1.50 per unit  
Total cost = Fixed cost + (Variable cost per unit × Units) = $40,000 + ($1.50 per unit × 42,000 units) = $103,000

B

Variable cost per unit = Total variable cost ÷ Units = $60,000 ÷ 40,000 = $1.50 per unit  
Total cost = Fixed cost + (Variable cost per unit × Units) = $40,000 + ($1.50 per unit × 50,000 units) = $115,000  
Cost per unit = $115,000 ÷ 50,000 units = $2.30 per unit

D

Average fixed inspection cost = Total fixed inspection cost ÷ Total activity  
= $188,301 ÷ 6,900 machine-hours  
= $27.29 per machine-hour

D

Average fixed inspection cost = Total fixed inspection cost ÷ Total activity  
= $9,072 ÷ 2,400 machine-hours  
= $3.78 per machine-hour

C

Variable inspection cost per unit = Total variable inspection cost ÷ Total activity  
= $69,846 ÷ 2,100 machine-hours  
= $33.26 per machine-hour  
Total variable inspection cost = Variable inspection cost per unit × Total activity  
= $33.26 per machine-hour × 2,400 machine-hours  
= $79,824

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 28.00 |
| **Direct materials** | $ 5.20 |  |
| **Direct labor** | 5.40 |  |
| **Variable manufacturing overhead** | 2.00 |  |
| **Sales commissions** | 0.70 |  |
| **Variable administrative expense** | 0.65 |  |
| **Variable cost per unit sold** |  | 13.95 |
| **Contribution margin per unit** |  | $ 14.05 |

A

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 25.00 |
| **Direct materials** | $ 4.85 |  |
| **Direct labor** | 4.20 |  |
| **Variable manufacturing overhead** | 1.55 |  |
| **Sales commissions** | 0.50 |  |
| **Variable administrative expense** | 0.45 |  |
| **Variable cost per unit sold** |  | 11.55 |
| **Contribution margin per unit** |  | $ 13.45 |

A

|  |  |
| --- | --- |
| **Direct materials** | $ 4.85 |
| **Direct labor** | 4.20 |
| **Variable manufacturing overhead** | 1.55 |
| **Incremental manufacturing cost** | $ 10.60 |

D

Unit sales = $800,000 ÷ $40 per book = 20,000 books

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 800,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 560,000 |  |
| **Variable selling ($3 per book × 20,000 books)** | 60,000 |  |
| **Variable administrative (5% of $800,000)** | 40,000 | 660,000 |
| **Contribution margin** |  | $ 140,000 |

A

Unit sales = $800,000 ÷ $40 per book = 20,000 books  
Fixed selling expense = $100,000 − $3 per book × 20,000 books = $40,000  
Fixed administrative expense = $110,000 − 0.05 × $800,000 = $70,000

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 800,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 560,000 |  |
| **Variable selling ($3 per book × 20,000 books)** | 60,000 |  |
| **Variable administrative (5% of $800,000)** | 40,000 | 660,000 |
| **Contribution margin** |  | $ 140,000 |
| **Fixed expenses:** |  |  |
| **Fixed selling** | 40,000 |  |
| **Fixed administrative** | 70,000 | 110,000 |
| **Net operating income** |  | $ 30,000 |

C

Unit sales = $800,000 ÷ $40 per book = 20,000 books  
Fixed selling expense = $100,000 − $3 per book × 20,000 books = $40,000  
Fixed administrative expense = $110,000 − 0.05 × $800,000 = $70,000  
Y = ($40,000 + $70,000) + ($3 per book + 0.05 × $40 per book) X  
Y = $110,000 + $5X

C

Unit sales = $800,000 ÷ $40 per book = 20,000 books  
Cost per book = $560,000 ÷ 20,000 books = $28 per book

|  |  |  |
| --- | --- | --- |
| **Sales ($40 per book × 25,000 books)** |  | $ 1,000,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold ($28 per book × 25,000 books)** | $ 700,000 |  |
| **Variable selling ($3 per book × 25,000 books)** | 75,000 |  |
| **Variable administrative (5% of $1,000,000)** | 50,000 | 825,000 |
| **Contribution margin** |  | $ 175,000 |

C

Unit sales = $900,000 ÷ $60 per book = 15,000 books

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 900,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 555,000 |  |
| **Variable selling ($6 per book × 15,000 books)** | 90,000 |  |
| **Variable administrative (5% of $900,000)** | 45,000 | 690,000 |
| **Contribution margin** |  | $ 210,000 |

C

Unit sales = $900,000 ÷ $50 per book = 18,000 books

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 900,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 630,000 |  |
| **Variable selling ($5 per book × 18,000 books)** | 90,000 |  |
| **Variable administrative (4% of $900,000)** | 36,000 | 756,000 |
| **Contribution margin** |  | $ 144,000 |

D

Unit sales = $980,000 ÷ $70 per book = 14,000 books  
Selling expenses = Fixed selling expenses + ($4 per book × 14,000 books)  
$110,000 = Fixed selling expenses + $56,000  
Fixed selling expenses = $110,000 − $56,000 = $54,000  
Administrative expenses = Fixed administrative expenses + (3% of $980,000)  
$124,000 = Fixed administrative expenses + $29,400  
Fixed administrative expenses = $124,000 − $29,400 = $94,600

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 980,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 680,000 |  |
| **Variable selling ($4 per book × 14,000 books)** | 56,000 |  |
| **Variable administrative (3% of $980,000)** | 29,400 | 765,400 |
| **Contribution margin** |  | $ 214,600 |
| **Fixed expenses:** |  |  |
| **Fixed selling** | 54,000 |  |
| **Fixed administrative** | 94,600 | 148,600 |
| **Net operating income** |  | $ 66,000 |

D

Unit sales = $900,000 ÷ $50 per book = 18,000 books  
Selling expenses = Fixed selling expenses + ($5 per book × 18,000 books)  
$100,000 = Fixed selling expenses + $90,000  
Fixed selling expenses = $100,000 − $90,000 = $10,000  
Administrative expenses = Fixed administrative expenses + (4% of $900,000)  
$104,000 = Fixed administrative expenses + $36,000  
Fixed administrative expenses = $104,000 − $36,000 = $68,000

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 900,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 630,000 |  |
| **Variable selling ($5 per book × 18,000 books)** | 90,000 |  |
| **Variable administrative (4% of $900,000)** | 36,000 | 756,000 |
| **Contribution margin** |  | $ 144,000 |
| **Fixed expenses:** |  |  |
| **Fixed selling** | 10,000 |  |
| **Fixed administrative** | 68,000 | 78,000 |
| **Net operating income** |  | $ 66,000 |

C

Unit sales = $990,000 ÷ $60 per book = 16,500 books  
Selling expenses = Fixed selling expenses + ($6 per book × 16,500 books)  
$109,000 = Fixed selling expenses + $99,000  
Fixed selling expenses = $109,000 − $99,000 = $10,000  
Administrative expenses = Fixed administrative expenses + (0.05 × $990,000)  
$122,000 = Fixed administrative expenses + $49,500  
Fixed administrative expenses = $122,000 − $49,500 = $72,500  
Variable administrative expense per unit = 0.05 × $60 per book = $3.00 per book  
Y = ($10,000 + $72,500) + ($6 + $3.00) X  
Y = $82,500 + $9.00X

C

Unit sales = $900,000 ÷ $50 per book = 18,000 books  
Selling expenses = Fixed selling expenses + ($5 per book × 18,000 books)  
$100,000 = Fixed selling expenses + $90,000  
Fixed selling expenses = $100,000 − $90,000 = $10,000  
Administrative expenses = Fixed administrative expenses + (0.04 × $900,000)  
$104,000 = Fixed administrative expenses + $36,000  
Fixed administrative expenses = $104,000 − $36,000 = $68,000  
Variable administrative expense per unit = 0.04 × $50 per book = $2 per book  
Y = ($10,000 + $68,000) + ($5 + $2) X  
Y = $78,000 + $7X

B

Unit sales = $900,000 ÷ $50 per book = 18,000 books  
Unit cost of goods sold = $630,000 ÷ 18,000 books = $35 per book

|  |  |  |
| --- | --- | --- |
| **Sales ($50 per book × 20,000 books)** |  | $ 1,000,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold ($35 per book × 20,000 books)** | $ 700,000 |  |
| **Variable selling ($5 per book × 20,000 books)** | 100,000 |  |
| **Variable administrative (4% of $1,000,000)** | 40,000 | 840,000 |
| **Contribution margin** |  | $ 160,000 |

A

Differential cost = $545,000 − $450,000 = $95,000

C

Sunk cost = Cost of old machine = $527,000

C

Opportunity cost = Return from alternative investment = $532,000

A

Sunk cost = Cost of old machine = $477,000

A

Sunk cost = Cost of old machine = $348,000

A

Differential cost = $534,000 − $422,000 = $112,000

A

Differential cost = $360,000 − $340,000 = $20,000

D

Opportunity cost = Return from alternative investment = $491,000

D

Opportunity cost = Return from alternative investment = $411,000

B

|  |  |
| --- | --- |
| **Sales** | $ 419,000 |
| **Cost of goods sold** | 175,500 |
| **Gross margin** | $ 243,500 |

B

|  |  |
| --- | --- |
| **Sales** | $ 4,096,400 |
| **Cost of goods sold** | 2,194,500 |
| **Gross margin** | $ 1,901,900 |

A

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 500,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 170,700 |  |
| **Variable selling expense** | 24,600 |  |
| **Variable administrative expense** | 10,000 | 205,300 |
| **Contribution margin** |  | $ 294,700 |

A

|  |  |  |
| --- | --- | --- |
| **Sales** |  | $ 4,096,400 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 2,194,500 |  |
| **Variable selling expense** | 238,700 |  |
| **Variable administrative expense** | 238,700 | 2,671,900 |
| **Contribution margin** |  | $ 1,424,500 |

C

Cost of goods sold = Beginning merchandise inventory + Purchases of merchandise inventory − Ending merchandise inventory  
= $46,000 + $128,000 − $52,000  
= $122,000

C

Net operating income = Sales − Cost of goods sold − Selling and administrative expenses  
= $260,000 − $122,000 − ($13,000 + $40,000)  
= $85,000

B

|  |  |  |
| --- | --- | --- |
| **Sales (7,100 units × $682 per unit)** |  | $ 4,842,200 |
| **Variable expenses:** |  |  |
| **Cost of goods sold (7,100 units × $317 per unit)** | $ 2,250,700 |  |
| **Variable selling expense (7,100 units × $44 per unit)** | 312,400 |  |
| **Variable administrative expense (7,100 units × $22 per unit)** | 156,200 | 2,719,300 |
| **Contribution margin** |  | $ 2,122,900 |

B

|  |  |
| --- | --- |
| **Sales (7,100 units × $682 per unit)** | $ 4,842,200 |
| **Cost of goods sold (7,100 units × $317 per unit)** | 2,250,700 |
| **Gross margin** | $ 2,591,500 |

B

|  |  |
| --- | --- |
| **Sales (1,200 units × $221 per unit)** | $ 265,200 |
| **Cost of goods sold (1,200 units × $97 per unit)** | 116,400 |
| **Gross margin** | $ 148,800 |

D

|  |  |  |
| --- | --- | --- |
| **Sales (1,200 units × $221 per unit)** |  | $ 265,200 |
| **Variable expenses:** |  |  |
| **Cost of goods sold (1,200 units × $97 per unit)** | $ 116,400 |  |
| **Variable selling expense (1,200 units × $12 per unit)** | 14,400 |  |
| **Variable administrative expense (1,200 units × $8 per unit)** | 9,600 | 140,400 |
| **Contribution margin** |  | $ 124,800 |

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| **Sales** |  | $ 1,555,500 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 1,025,100 |  |
| **Variable selling expense** | 96,900 |  |
| **Variable administrative expense** | 71,400 | 1,193,400 |
| **Contribution margin** |  | $ 362,100 |

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| **Sales** | $ 1,555,500 |
| **Cost of goods sold** | 1,025,100 |
| **Gross margin** | $ 530,400 |

Essay

Wages of carpenters on a home building site; A particular home; Direct

Cost of wiring used in making a personal computer; A particular personal computer; Indirect

Manager's salary at a hotel run by a chain of hotels; A particular hotel guest; Indirect

Manager's salary at a hotel run by a chain of hotels; The particular hotel; Direct

Cost of aluminum mast installed in a yacht at a yacht manufacturer; A particular yacht; Direct

Monthly lease cost of X-ray equipment at a hospital; The Radiology (X-Ray) Department; Direct

Cost of screws used to secure wood trim in a yacht at a yacht manufacturer; A particular yacht; Indirect

Cost of electronic navigation system installed in a yacht at a yacht manufacturer; A particular yacht; Direct

Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer; The auto repair shop; Direct

Cost of a measles vaccine administered at an outpatient clinic at a hospital; A particular patient; Direct

Essay

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| **Direct materials** | | $ 7.05 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.60 | |
| **Variable manufacturing cost per unit** | | $ 12.30 | |
| **Total variable manufacturing cost**  **($12.30 per unit × 9,000 units produced)** | | $ 110,700 | |
| **Total fixed manufacturing overhead cost** | | 113,400 | |
| **Total product (manufacturing) cost** | | $ 224,100 | |
| **Sales commissions** | | $ 1.50 | |
| **Variable administrative expense** | | 0.55 | |
| **Variable selling and administrative expense per unit** | | $ 2.05 | |
| **Total variable selling and administrative expense**  **($2.05 per unit × 9,000 units sold)** | | $ 18,450 | |
| **Total fixed selling and administrative expense** | | 36,450 | |
| **Total period (nonmanufacturing) cost** | | $ 54,900 | |
| **Direct materials** | | $ 7.05 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.60 | |
| **Sales commissions** | | 1.50 | |
| **Variable administrative expense** | | 0.55 | |
| **Variable cost per unit sold** | | $ 14.35 | |
| **Variable cost per unit sold (a)** | | $ 14.35 | |
| **Number of units sold (b)** | | 10,000 | |
| **Total variable costs (a) × (b)** | | $ 143,500 | |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 10,000 units)** | | $ 16,000 | |
| **Total fixed manufacturing overhead cost** | | 113,400 | |
| **Total manufacturing overhead cost (a)** | | $ 129,400 | |
| **Selling price per unit** | |  | | $ 21.60 |
| **Direct materials** | | $ 7.05 | |  |
| **Direct labor** | | 3.65 | |  |
| **Variable manufacturing overhead** | | 1.60 | |  |
| **Sales commissions** | | 1.50 | |  |
| **Variable administrative expense** | | 0.55 | |  |
| **Variable cost per unit sold** | |  | | 14.35 |
| **Contribution margin per unit** | |  | | $ 7.25 |
| **Direct materials** | | $ 7.05 | |
| **Direct labor** | | 3.65 | |
| **Direct manufacturing cost per unit (a)** | | $ 10.70 | |
| **Number of units produced (b)** | | 8,000 | |
| **Total direct manufacturing cost (a) × (b)** | | $ 85,600 | |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 8,000 units)** | | $ 12,800 | |
| **Total fixed manufacturing overhead cost** | | 113,400 | |
| **Total indirect manufacturing cost** | | $ 126,200 | |
| **Direct materials** | | $ 7.05 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.60 | |
| **Incremental manufacturing cost** | | $ 12.30 | |

Essay

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| **Direct materials** | | $ 5.50 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.80 | |
| **Variable manufacturing cost per unit** | | $ 10.95 | |
| **Total variable manufacturing cost**  **($10.95 per unit × 5,600 units produced)** | | $ 61,320 | |
| **Total fixed manufacturing overhead cost**  **($3.60 per unit × 5,600 units produced)** | | 20,160 | |
| **Total product (manufacturing) cost** | | $ 81,480 | |
| **Sales commissions** | | $ 0.55 | |
| **Variable administrative expense** | | 0.55 | |
| **Variable selling and administrative expense per unit** | | $ 1.10 | |
| **Total variable selling and administrative expense**  **($1.10 per unit × 5,600 units sold)** | | $ 6,160 | |
| **Total fixed selling and administrative expense**  **($0.80 per unit × 5,600 units + $0.65 per unit × 5,600 units)** | | 8,120 | |
| **Total period (nonmanufacturing) cost** | | $ 14,280 | |
| **Direct materials** | | $ 5.50 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.80 | |
| **Sales commissions** | | 0.55 | |
| **Variable administrative expense** | | 0.55 | |
| **Variable cost per unit sold** | | $ 12.05 | |
| **Variable cost per unit sold (a)** | | $ 12.05 | |
| **Number of units sold (b)** | | 6,600 | |
| **Total variable costs (a) × (b)** | | $ 79,530 | |
| **Total fixed manufacturing overhead cost**  **($3.60 per unit × 5,600 units\*Footnote asterisk) (a)** | | $ 20,160 | |
| **Number of units produced (b)** | | 6,600 | |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | | $ 3.05 | |

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| **Fixed manufacturing overhead per unit** | $ 3.60 | |
| **Number of units produced** | 5,600 | |
| **Total fixed manufacturing overhead cost** | $ 20,160 | |
| **Total variable manufacturing overhead cost**  **($1.80 per unit × 6,600 units)** | | $ 11,880 |
| **Total fixed manufacturing overhead cost**  **($3.60 per unit × 5,600 units\*Footnote asterisk)** | | 20,160 |
| **Total manufacturing overhead cost (a)** | | $ 32,040 |
| **Number of units produced (b)** | | 6,600 |
| **Manufacturing overhead per unit (a) ÷ (b)** | | $ 4.85 |

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| **Selling price per unit** | |  | | $ 23.00 |
| **Direct materials** | | $ 5.50 | |  |
| **Direct labor** | | 3.65 | |  |
| **Variable manufacturing overhead** | | 1.80 | |  |
| **Sales commissions** | | 0.55 | |  |
| **Variable administrative expense** | | 0.55 | |  |
| **Variable cost per unit sold** | |  | | 12.05 |
| **Contribution margin per unit** | |  | | $ 10.95 |
| **Direct materials** | | $ 5.50 | |
| **Direct labor** | | 3.65 | |
| **Direct manufacturing cost per unit (a)** | | $ 9.15 | |
| **Number of units produced (b)** | | 4,600 | |
| **Total direct manufacturing cost (a) × (b)** | | $ 42,090 | |
| **Total variable manufacturing overhead cost**  **($1.80 per unit × 4,600 units)** | | $ 8,280 | |
| **Total fixed manufacturing overhead cost**  **($3.60 per unit × 5,600 units\*Footnote asterisk)** | | 20,160 | |
| **Total indirect manufacturing cost** | | $ 28,440 | |

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| **Direct materials** | $ 5.50 |
| **Direct labor** | 3.65 |
| **Variable manufacturing overhead** | 1.80 |
| **Incremental manufacturing cost** | $ 10.95 |

Essay

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| **Direct materials** | | $ 5.30 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.50 | |
| **Variable manufacturing cost per unit** | | $ 10.45 | |
| **Total variable manufacturing cost**  **($10.45 per unit × 5,000 units produced)** | | $ 52,250 | |
| **Total fixed manufacturing overhead cost**  **($3.90 per unit × 5,000 units produced)** | | 19,500 | |
| **Total product (manufacturing) cost** | | $ 71,750 | |
| **Sales commissions** | | $ 0.50 | |
| **Variable administrative expense** | | 0.50 | |
| **Variable selling and administrative expense per unit** | | $ 1.00 | |
| **Total variable selling and administrative expense**  **($1.00 per unit × 5,000 units sold)** | | $ 5,000 | |
| **Total fixed selling and administrative expense**  **($0.75 per unit × 5,000 units + $0.60 per unit × 5,000 units)** | | 6,750 | |
| **Total period (nonmanufacturing) cost** | | $ 11,750 | |
| **Direct materials** | | $ 5.30 | |
| **Direct labor** | | 3.65 | |
| **Variable manufacturing overhead** | | 1.50 | |
| **Sales commissions** | | 0.50 | |
| **Variable administrative expense** | | 0.50 | |
| **Variable cost per unit sold** | | $ 11.45 | |
| **Variable cost per unit sold (a)** | | $ 11.45 | |
| **Number of units sold (b)** | | 6,000 | |
| **Total variable costs (a) × (b)** | | $ 68,700 | |
| **Total fixed manufacturing overhead cost**  **($3.90 per unit × 5,000 units\*Footnote asterisk) (a)** | | $ 19,500 | |
| **Number of units produced (b)** | | 6,000 | |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | | $ 3.25 | |

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| --- | --- | --- |
| **Fixed manufacturing overhead per unit** | $ 3.90 | |
| **Number of units produced** | 5,000 | |
| **Total fixed manufacturing overhead cost** | $ 19,500 | |
| **Total variable manufacturing overhead cost**  **($1.50 per unit × 6,000 units)** | | $ 9,000 |
| **Total fixed manufacturing overhead cost**  **($3.90 per unit × 5,000 units\*Footnote asterisk)** | | 19,500 |
| **Total manufacturing overhead cost (a)** | | $ 28,500 |
| **Number of units produced (b)** | | 6,000 |
| **Manufacturing overhead per unit (a) ÷ (b)** | | $ 4.75 |

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| **Selling price per unit** |  | $ 22.90 |
| **Direct materials** | $5.30 |  |
| **Direct labor** | 3.65 |  |
| **Variable manufacturing overhead** | 1.50 |  |
| **Sales commissions** | 0.50 |  |
| **Variable administrative expense** | 0.50 |  |
| **Variable cost per unit sold** |  | 11.45 |
| **Contribution margin per unit** |  | $ 11.45 |
| **Direct materials** | $ 5.30 |
| **Direct labor** | 3.65 |
| **Direct manufacturing cost per unit (a)** | $ 8.95 |
| **Number of units produced (b)** | 4,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 35,800 |
| **Total variable manufacturing overhead cost**  **($1.50 per unit × 4,000 units)** | | $ 6,000 |
| **Total fixed manufacturing overhead cost**  **($3.90 per unit × 5,000 units\*Footnote asterisk)** | | 19,500 |
| **Total indirect manufacturing cost** | | $ 25,500 |

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| **Direct materials** | $ 5.30 |
| **Direct labor** | 3.65 |
| **Variable manufacturing overhead** | 1.50 |
| **Incremental manufacturing cost** | $ 10.45 |

Essay

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| **Direct materials** | | $ 6.40 |
| **Direct labor** | | 3.80 |
| **Variable manufacturing overhead** | | 1.60 |
| **Variable manufacturing cost per unit** | | $ 11.80 |
| **Total variable manufacturing cost**  **($11.80 per unit × 6,000 units produced)** | | $ 70,800 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 6,000 units produced)** | | 18,000 |
| **Total product (manufacturing) cost** | | $ 88,800 |
| **Sales commissions** | | $ 1.50 |
| **Variable administrative expense** | | 0.45 |
| **Variable selling and administrative expense per unit** | | $ 1.95 |
| **Total variable selling and administrative expense**  **($1.95 per unit × 6,000 units sold)** | | $ 11,700 |
| **Total fixed selling and administrative expense**  **($0.75 per unit × 6,000 units + $0.60 per unit × 6,000 units)** | | 8,100 |
| **Total period (nonmanufacturing) cost** | | $ 19,800 |
| **Selling price per unit** | |  | $ 20.20 |
| **Direct materials** | | $ 6.40 |  |
| **Direct labor** | | 3.80 |  |
| **Variable manufacturing overhead** | | 1.60 |  |
| **Sales commissions** | | 1.50 |  |
| **Variable administrative expense** | | 0.45 |  |
| **Variable cost per unit sold** | |  | 13.75 |
| **Contribution margin per unit** | |  | $ 6.45 |
| **Direct materials** | | $ 6.40 |
| **Direct labor** | | 3.80 |
| **Direct manufacturing cost per unit (a)** | | $ 10.20 |
| **Number of units produced (b)** | | 7,000 |
| **Total direct manufacturing cost (a) × (b)** | | $ 71,400 |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 7,000 units)** | | $ 11,200 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 6,000 units\*)** | | 18,000 |
| **Total indirect manufacturing cost** | | $ 29,200 |

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| **Direct materials** | $ 6.40 |
| **Direct labor** | 3.80 |
| **Variable manufacturing overhead** | 1.60 |
| **Incremental manufacturing cost** | $ 11.80 |

Essay

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| **Direct materials** | | $ 5.30 | |
| **Direct labor** | | 3.75 | |
| **Variable manufacturing overhead** | | 1.35 | |
| **Variable manufacturing cost per unit** | | $ 10.40 | |
| **Total variable manufacturing cost**  **($10.40 per unit × 8,000 units produced)** | | $ 83,200 | |
| **Total fixed manufacturing overhead cost** | | 36,000 | |
| **Total product (manufacturing) cost** | | $ 119,200 | |
| **Sales commissions** | | $ 0.70 | |
| **Variable administrative expense** | | 0.60 | |
| **Variable selling and administrative expense per unit** | | $ 1.30 | |
| **Total variable selling and administrative expense**  **($1.30 per unit × 8,000 units sold)** | | $ 10,400 | |
| **Total fixed selling and administrative expense** | | 12,000 | |
| **Total period (nonmanufacturing) cost** | | $ 22,400 | |
| **Selling price per unit** | |  | | $ 22.80 |
| **Direct materials** | | $ 5.30 | |  |
| **Direct labor** | | 3.75 | |  |
| **Variable manufacturing overhead** | | 1.35 | |  |
| **Sales commissions** | | 0.70 | |  |
| **Variable administrative expense** | | 0.60 | |  |
| **Variable cost per unit sold** | |  | | 11.70 |
| **Contribution margin per unit** | |  | | $ 11.10 |
| **Direct materials** | | $ 5.30 | |
| **Direct labor** | | 3.75 | |
| **Direct manufacturing cost per unit (a)** | | $ 9.05 | |
| **Number of units produced (b)** | | 9,000 | |
| **Total direct manufacturing cost (a) × (b)** | | $ 81,450 | |
| **Total variable manufacturing overhead cost**  **($1.35 per unit × 9,000 units)** | | $ 12,150 | |
| **Total fixed manufacturing overhead cost** | | 36,000 | |
| **Total indirect manufacturing cost** | | $ 48,150 | |

Essay

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| **Direct materials** | | $ 5.20 | |
| **Direct labor** | | 3.85 | |
| **Variable manufacturing overhead** | | 1.35 | |
| **Variable manufacturing cost per unit** | | $ 10.40 | |
| **Total variable manufacturing cost**  **($10.40 per unit × 6,000 units produced)** | | $ 62,400 | |
| **Total fixed manufacturing overhead cost** | | 27,000 | |
| **Total product (manufacturing) cost** | | $ 89,400 | |
| **Sales commissions** | | $ 0.50 | |
| **Variable administrative expense** | | 0.40 | |
| **Variable selling and administrative expense per unit** | | $ 0.90 | |
| **Total variable selling and administrative expense**  **($0.90 per unit × 6,000 units sold)** | | $ 5,400 | |
| **Total fixed selling and administrative expense** | | 9,000 | |
| **Total period (nonmanufacturing) cost** | | $ 14,400 | |
| **Selling price per unit** | |  | | $ 22.40 |
| **Direct materials** | | $ 5.20 | |  |
| **Direct labor** | | 3.85 | |  |
| **Variable manufacturing overhead** | | 1.35 | |  |
| **Sales commissions** | | 0.50 | |  |
| **Variable administrative expense** | | 0.40 | |  |
| **Variable cost per unit sold** | |  | | 11.30 |
| **Contribution margin per unit** | |  | | $ 11.10 |
| **Direct materials** | | $ 5.20 | |
| **Direct labor** | | 3.85 | |
| **Direct manufacturing cost per unit (a)** | | $ 9.05 | |
| **Number of units produced (b)** | | 7,000 | |
| **Total direct manufacturing cost (a) × (b)** | | $ 63,350 | |
| **Total variable manufacturing overhead cost**  **($1.35 per unit × 7,000 units)** | | $ 9,450 | |
| **Total fixed manufacturing overhead cost** | | 27,000 | |
| **Total indirect manufacturing cost** | | $ 36,450 | |

Essay

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| --- | --- | --- |
| **Fixed manufacturing overhead per unit** | $ 3.00 | |
| **Number of units produced** | 5,000 | |
| **Total fixed manufacturing overhead cost** | $ 15,000 | |
| **Total variable manufacturing overhead cost**  **($1.25 per unit × 6,000 units)** | | $ 7,500 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 5,000 units\*Footnote asterisk)** | | 15,000 |
| **Total manufacturing overhead cost (a)** | | $ 22,500 |
| **Number of units produced (b)** | | 6,000 |
| **Manufacturing overhead per unit (a) ÷ (b)** | | $ 3.75 |

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.10 | |
| **Direct labor** | 2.90 | |
| **Direct manufacturing cost per unit (a)** | $ 9.00 | |
| **Number of units produced (b)** | 4,000 | |
| **Total direct manufacturing cost (a) × (b)** | $ 36,000 | |
| **Total variable manufacturing overhead cost**  **($1.25 per unit × 4,000 units)** | | $ 5,000 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 5,000 units\*Footnote asterisk)** | | 15,000 |
| **Total indirect manufacturing cost** | | $ 20,000 |

Essay

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 5.30 | |
| **Direct labor** | 3.50 | |
| **Direct manufacturing cost per unit (a)** | $ 8.80 | |
| **Number of units produced (b)** | 10,000 | |
| **Total direct manufacturing cost (a) × (b)** | $ 88,000 | |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 10,000 units)** | | $ 16,000 |
| **Total fixed manufacturing overhead cost** | | 150,000 |
| **Total indirect manufacturing cost** | | $ 166,000 |

Essay

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| --- | --- | --- |
| **Direct materials** | $ 5.70 | |
| **Direct labor** | 3.60 | |
| **Direct manufacturing cost per unit (a)** | $ 9.30 | |
| **Number of units produced (b)** | 8,000 | |
| **Total direct manufacturing cost (a) × (b)** | $ 74,400 | |
| **Total variable manufacturing overhead cost**  **($1.50 per unit × 8,000 units)** | | $ 12,000 |
| **Total fixed manufacturing overhead cost** | | 121,500 |
| **Total indirect manufacturing cost** | | $ 133,500 |

Essay

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 21.40 |
| **Direct materials** | $ 6.25 |  |
| **Direct labor** | 4.15 |  |
| **Variable manufacturing overhead** | 1.60 |  |
| **Sales commissions** | 1.50 |  |
| **Variable administrative expense** | 0.45 |  |
| **Variable cost per unit sold** |  | 13.95 |
| **Contribution margin per unit** |  | $ 7.45 |
| **Direct materials** | $ 6.25 |
| **Direct labor** | 4.15 |
| **Direct manufacturing cost per unit (a)** | $ 10.40 |
| **Number of units produced (b)** | 8,000 |
| **Total direct manufacturing cost (a) × (b)** | $ 83,200 |
| **Total variable manufacturing overhead cost**  **($1.60 per unit × 8,000 units)** | | $ 12,800 |
| **Total fixed manufacturing overhead cost**  **($12.60 per unit × 9,000 units\*)** | | 113,400 |
| **Total indirect manufacturing cost** | | $ 126,200 |

|  |  |
| --- | --- |
| **Direct materials** | $ 6.25 |
| **Direct labor** | 4.15 |
| **Variable manufacturing overhead** | 1.60 |
| **Incremental manufacturing cost** | $ 12.00 |

Essay

|  |  |  |  |
| --- | --- | --- | --- |
| **Direct materials** | | $ 5.20 | |
| **Direct labor** | | 3.40 | |
| **Variable manufacturing overhead** | | 1.35 | |
| **Variable manufacturing cost per unit** | | $ 9.95 | |
| **Total variable manufacturing cost**  **($9.95 per unit × 4,000 units produced)** | | $ 39,800 | |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units produced)** | | 12,000 | |
| **Total product (manufacturing) cost** | | $ 51,800 | |
| **Sales commissions** | | $ 1.50 | |
| **Variable administrative expense** | | 0.45 | |
| **Variable selling and administrative expense per unit** | | $ 1.95 | |
| **Total variable selling and administrative expense**  **($1.95 per unit × 4,000 units sold)** | | $ 7,800 | |
| **Total fixed selling and administrative expense**  **($0.70 per unit × 4,000 units + $0.40 per unit × 4,000 units)** | | 4,400 | |
| **Total period (nonmanufacturing) cost** | | $ 12,200 | |
| **Direct materials** | | $ 5.20 | |
| **Direct labor** | | 3.40 | |
| **Variable manufacturing overhead** | | 1.35 | |
| **Sales commissions** | | 1.50 | |
| **Variable administrative expense** | | 0.45 | |
| **Variable cost per unit sold** | | $ 11.90 | |
| **Variable cost per unit sold (a)** | | $ 11.90 | |
| **Number of units sold (b)** | | 5,000 | |
| **Total variable costs (a) × (b)** | | $ 59,500 | |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units\*Footnote asterisk) (a)** | | $ 12,000 | |
| **Number of units produced (b)** | | 5,000 | |
| **Average fixed manufacturing cost per unit produced (a) ÷ (b)** | | $ 2.40 | |

|  |  |  |
| --- | --- | --- |
| **Fixed manufacturing overhead per unit** | $ 3.00 | |
| **Number of units produced** | 4,000 | |
| **Total fixed manufacturing overhead cost** | $ 12,000 | |
| **Total variable manufacturing overhead cost**  **($1.35 per unit × 5,000 units)** | | $ 6,750 |
| **Total fixed manufacturing overhead cost**  **($3.00 per unit × 4,000 units\*Footnote asterisk)** | | 12,000 |
| **Total manufacturing overhead cost (a)** | | $ 18,750 |
| **Number of units produced (b)** | | 5,000 |
| **Manufacturing overhead per unit (a) ÷ (b)** | | $ 3.75 |

Essay

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.25 | |
| **Direct labor** | 3.25 | |
| **Variable manufacturing overhead** | 1.45 | |
| **Sales commissions** | 0.50 | |
| **Variable administrative expense** | 0.40 | |
| **Variable cost per unit sold** | $ 11.85 | |
| **Variable cost per unit sold (a)** | $ 11.85 | |
| **Number of units sold (b)** | 5,000 | |
| **Total variable costs (a) × (b)** | $ 59,250 | |
| **Total variable manufacturing overhead cost ($1.45 per unit × 5,000 units)** | | $ 7,250 |
| **Total fixed manufacturing overhead cost** | | 18,000 |
| **Total manufacturing overhead cost (a)** | | $ 25,250 |

Essay

<ol style=" list-style-type: lower-alpha; padding-left: 20px;"><li>Product costs consist of direct materials, direct labor, and manufacturing overhead:

|  |  |  |
| --- | --- | --- |
| **Direct materials** |  | $ 181,000 |
| **Direct labor** |  | 120,000 |
| **Manufacturing overhead:** |  |  |
| **Utilities, factory** | $ 10,000 |  |
| **Indirect labor** | 32,000 |  |
| **Depreciation of production equipment** | 28,000 | 70,000 |
| **Total product cost** |  | $ 371,000 |

</li><li>Period costs consist of all costs other than product costs:

|  |  |
| --- | --- |
| **Sales commissions** | $ 69,000 |
| **Administrative salaries** | 99,000 |
| **Advertising** | 75,000 |
| **Depreciation of administrative equipment** | 49,000 |
| **Total period cost** | $ 292,000 |

Essay

* + - * 1. Gary Resnick has suggested reclassifying some period costs as product costs since the company is building up large finished goods inventories in anticipation of the Christmas selling season. Product costs are inventoried and flow through to the income statement only when products are sold. Period expenses, in contrast, flow directly to the income statement. Because most of the finished goods inventories will be held over to the next quarter, reclassifying period costs as product costs will effectively defer recognition of expenses until next quarter and therefore will improve the current quarter's net operating income.
        2. Mary Tappin is probably alarmed by both the economic situation the company finds itself in and by the apparent willingness of top management to bend the rules. Improperly reclassifying costs is an indication that top management does not feel like it has to play by the rules or be honest in its dealings with the bank. With such loose ethical standards, Mary may wonder what other unethical things they are doing.

Essay

<ol style=" list-style-type: lower-alpha; font-weight: normal;padding-left: 20px;"><li>Product costs consist of direct materials, direct labor, and manufacturing overhead:

|  |  |  |
| --- | --- | --- |
| **Direct materials** |  | $ 197,000 |
| **Direct labor** |  | 78,000 |
| **Manufacturing overhead:** |  |  |
| **Property taxes, factory** | $ 8,000 |  |
| **Indirect labor** | 31,000 |  |
| **Depreciation of production equipment** | 39,000 | 78,000 |
| **Total product cost** |  | $ 353,000 |

</li><li>Period costs consist of all costs other than product costs:

|  |  |
| --- | --- |
| **Marketing salaries** | $ 39,000 |
| **Administrative travel** | 102,000 |
| **Sales commissions** | 73,000 |
| **Advertising** | 145,000 |
| **Total period cost** | $ 359,000 |

Essay

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Direct Materials** | **Direct Labor** | **Manufacturing Overhead** | **Period Cost** |
| **a. Steel used in automobiles** | X |  |  |  |
| **b. Assembly department employee wages** |  | X |  |  |
| **c. Utility costs used in executive building** |  |  |  | X |
| **d. Travel costs of sales personnel** |  |  |  | X |
| **e. Cost of shipping goods to customers** |  |  |  | X |
| **f. Property taxes on assembly plant** |  |  | X |  |
| **g. Glass used in automobiles** | X |  |  |  |
| **h. Factory maintenance supplies** |  |  | X |  |
| **i. Depreciation on assembly plant** |  |  | X |  |
| **j. Plant manager's salary** |  |  | X |  |
| **k. CEO's salary** |  |  |  | X |
| **l. Depreciation on executive building** |  |  |  | X |
| **m. Salary of marketing executive** |  |  |  | X |
| **n. Tires installed on automobiles** | X |  |  |  |
| **o. Advertising** |  |  |  | X |

Essay

|  |  |
| --- | --- |
| **Direct materials** | $ 6.25 |
| **Direct labor** | 2.90 |
| **Variable manufacturing overhead** | 1.30 |
| **Variable manufacturing cost per unit** | $ 10.45 |
| **Total variable manufacturing cost**  **($10.45 per unit × 5,000 units produced)** | $ 52,250 |
| **Total fixed manufacturing overhead cost** | 18,000 |
| **Total product (manufacturing) cost** | $ 70,250 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | 0.45 |
| **Variable selling and administrative expense per unit** | $ 1.95 |
| **Total variable selling and administrative expense**  **($1.95 per unit × 5,000 units sold)** | $ 9,750 |
| **Total fixed selling and administrative expense** | 7,500 |
| **Total period (nonmanufacturing) cost** | $ 17,250 |

Essay

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| --- | --- | --- |
| **Direct materials** | $ 7.40 | |
| **Direct labor** | 4.00 | |
| **Variable manufacturing overhead** | 1.30 | |
| **Variable manufacturing cost per unit** | $ 12.70 | |
| **Total variable manufacturing cost**  **($12.70 per unit × 12,000 units produced)** | | $ 152,400 |
| **Total fixed manufacturing overhead cost**  **($14.20 per unit × 12,000 units produced)** | | 170,400 |
| **Total product (manufacturing) cost** | | $ 322,800 |
| **Direct materials** | $ 7.40 | |
| **Direct labor** | 4.00 | |
| **Variable manufacturing overhead** | 1.30 | |
| **Sales commissions** | 0.60 | |
| **Variable administrative expense** | 0.50 | |
| **Variable cost per unit sold** | $ 13.80 | |
| **Variable cost per unit sold (a)** | $ 13.80 | |
| **Number of units sold (b)** | 14,000 | |
| **Total variable costs (a) × (b)** | $ 193,200 | |
| **Selling price per unit** |  | | $ 19.00 |
| **Direct materials** | $ 7.40 | |  |
| **Direct labor** | 4.00 | |  |
| **Variable manufacturing overhead** | 1.30 | |  |
| **Sales commissions** | 0.60 | |  |
| **Variable administrative expense** | 0.50 | |  |
| **Variable cost per unit sold** |  | | 13.80 |
| **Contribution margin per unit** |  | | $ 5.20 |
| **Direct materials** | $ 7.40 | |
| **Direct labor** | 4.00 | |
| **Variable manufacturing overhead** | 1.30 | |
| **Incremental manufacturing cost** | $ 12.70 | |

Essay

|  |  |  |
| --- | --- | --- |
| **Direct materials** | $ 6.80 | |
| **Direct labor** | 3.20 | |
| **Variable manufacturing overhead** | 1.60 | |
| **Variable manufacturing cost per unit** | $ 11.60 | |
| **Total variable manufacturing cost**  **($11.60 per unit × 9,000 units produced)** | | $ 104,400 |
| **Total fixed manufacturing overhead cost**  **($13.50 per unit × 9,000 units produced)** | | 121,500 |
| **Total product (manufacturing) cost** | | $ 225,900 |
| **Direct materials** | $ 6.80 | |
| **Direct labor** | 3.20 | |
| **Variable manufacturing overhead** | 1.60 | |
| **Sales commissions** | 0.50 | |
| **Variable administrative expense** | 0.40 | |
| **Variable cost per unit sold** | $ 12.50 | |
| **Variable cost per unit sold (a)** | $ 12.50 | |
| **Number of units sold (b)** | 10,000 | |
| **Total variable costs (a) × (b)** | $ 125,000 | |
| **Selling price per unit** |  | | $ 18.20 |
| **Direct materials** | $ 6.80 | |  |
| **Direct labor** | 3.20 | |  |
| **Variable manufacturing overhead** | 1.60 | |  |
| **Sales commissions** | 0.50 | |  |
| **Variable administrative expense** | 0.40 | |  |
| **Variable cost per unit sold** |  | | 12.50 |
| **Contribution margin per unit** |  | | $ 5.70 |
| **Direct materials** | $ 6.80 | |
| **Direct labor** | 3.20 | |
| **Variable manufacturing overhead** | 1.60 | |
| **Incremental manufacturing cost** | $ 11.60 | |

Essay

|  |  |
| --- | --- |
| **Direct materials** | $ 5.75 |
| **Direct labor** | 3.00 |
| **Variable manufacturing overhead** | 1.60 |
| **Variable manufacturing cost per unit** | $ 10.35 |
| **Total variable manufacturing cost**  **($10.35 per unit × 6,000 units produced)** | $ 62,100 |
| **Total fixed manufacturing overhead cost**  **($4.50 per unit × 6,000 units produced)** | 27,000 |
| **Total product (manufacturing) cost** | $ 89,100 |
| **Sales commissions** | $ 1.50 |
| **Variable administrative expense** | 0.55 |
| **Variable selling and administrative expense per unit** | $ 2.05 |
| **Total variable selling and administrative expense**  **($2.05 per unit × 6,000 units sold)** | $ 12,300 |
| **Total fixed selling and administrative expense**  **($0.75 per unit × 6,000 units + $0.60 per unit × 6,000 units)** | 8,100 |
| **Total period (nonmanufacturing) cost** | $ 20,400 |
| **Variable cost per unit sold (a)** | $ 12.40 |
| **Number of units sold (b)** | 5,000 |
| **Total variable costs (a) × (b)** | $ 62,000 |
| **Selling price per unit** |  | $ 19.10 |
| **Direct materials** | $ 5.75 |  |
| **Direct labor** | 3.00 |  |
| **Variable manufacturing overhead** | 1.60 |  |
| **Sales commissions** | 1.50 |  |
| **Variable administrative expense** | 0.55 |  |
| **Variable cost per unit sold** |  | 12.40 |
| **Contribution margin per unit** |  | $ 6.70 |
| **Direct materials** | $ 5.75 |
| **Direct labor** | 3.00 |
| **Variable manufacturing overhead** | 1.60 |
| **Incremental manufacturing cost** | $ 10.35 |

Essay

Salary of production manager at a surfboard manufacturer; Surfboards produced; Fixed

Cost of solder used in making computers; Computers produced; Variable

Cost of dough used at a pizza shop; Pizzas cooked; Variable

Janitorial wages at a surfboard manufacturer; Surfboards produced; Fixed

Salary of the controller at a hospital; Number of patients; Fixed

Cost of sales at an electronics store; Dollar sales; Variable

Cost of testing materials used in a medical lab; Tests run; Variable

Cost of heating an electronics store; Dollar sales; Fixed

Cost of electricity for production equipment at a surfboard manufacturer; Surfboards produced; Variable

Depreciation on shelving at a book store; Dollar sales; Fixed

Essay

Variable cost = $125,188 ÷ 6,800 units = $18.41 per unit

|  |  |
| --- | --- |
| **Activity level** | 7,100 |
| **Total cost:** |  |
| **Variable cost (a) [7,100 units × $18.41 per unit]** | $ 130,711 |
| **Fixed cost (b)** | 164,152 |
| **Total (c)** | $ 294,863 |
| **Cost per unit:** |  |
| **Variable cost (d)** | $ 18.41 |
| **Fixed cost (e) [$164,152 ÷ 7,100 units]** | 23.12 |
| **Total (f)** | $ 41.53 |

Essay

Variable cost = $174,504 ÷ 2,400 units = $72.71 per unit

|  |  |
| --- | --- |
| **Activity level** | 2,700 |
| **Total cost:** |  |
| **Variable cost (a) [2,700 units × $72.71 per unit]** | $ 196,317 |
| **Fixed cost (b)** | 55,080 |
| **Total (c)** | $ 251,397 |
| **Cost per unit:** |  |
| **Variable cost (d)** | $ 72.71 |
| **Fixed cost (e) [$55,080 ÷ 2,700 units]** | 20.40 |
| **Total (f)** | $ 93.11 |

Essay

Cost of vaccine used at a clinic; Vaccines administered; Variable

Building rent at a taco shop; Dollar sales; Fixed

Salary of production manager at a snowboard manufacturer; Snowboards produced; Fixed

Cost of electricity for production equipment at a snowboard manufacturer; Snowboards produced; Variable

Ferry captain's salary on a regularly scheduled passenger ferry; Number of passengers; Fixed

Cost of glue used in furniture production; Units produced; Variable

Janitorial wages at a snowboard manufacturer; Snowboards produced; Fixed

Depreciation on factory building at a snowboard manufacturer; Snowboards produced; Fixed

Cost of advertising at a snowboard company; Snowboards sold; Fixed

Cost of shipping bags of fertilizer to a customer at a chemical plant; Bags shipped; Variable

Essay

|  |  |  |
| --- | --- | --- |
| **Selling price per unit** |  | $ 25.90 |
| **Direct materials** | $ 6.65 |  |
| **Direct labor** | 3.30 |  |
| **Variable manufacturing overhead** | 1.70 |  |
| **Sales commissions** | 1.00 |  |
| **Variable administrative expense** | 0.50 |  |
| **Variable cost per unit sold** |  | 13.15 |
| **Contribution margin per unit** |  | $ 12.75 |
| **Direct materials** | $ 6.65 |
| **Direct labor** | 3.30 |
| **Variable manufacturing overhead** | 1.70 |
| **Incremental manufacturing cost** | $ 11.65 |

Essay

|  |  |  |
| --- | --- | --- |
| Traditional Format Income Statement | | |
| **Sales** |  | $ 311,000 |
| **Cost of goods sold\*Footnote asterisk** |  | 159,000 |
| **Gross margin** |  | 152,000 |
| **Selling and administrative expenses:** |  |  |
| **Selling expenses** | $ 23,000 |  |
| **Administrative expenses** | 34,000 | 57,000 |
| **Net operating income** |  | $ 95,000 |

\*Footnote asteriskCost of goods sold = Beginning merchandise inventory + Purchases − Ending merchandise inventory  
Cost of goods sold = $43,000 + $173,000 − $57,000 = $159,000

Essay

|  |  |  |
| --- | --- | --- |
| Traditional Format Income Statement | | |
| **Sales** |  | $ 221,000 |
| **Cost of goods sold\*Footnote asterisk** |  | 141,000 |
| **Gross margin** |  | 80,000 |
| **Selling and administrative expenses:** |  |  |
| **Selling expenses** | $ 14,000 |  |
| **Administrative expenses** | 25,000 | 39,000 |
| **Net operating income** |  | $ 41,000 |

\*Footnote asteriskCost of goods sold = Beginning merchandise inventory + Purchases − Ending merchandise inventory  
Cost of goods sold = $34,000 + $155,000 − $48,000 = $141,000

Essay

|  |  |  |
| --- | --- | --- |
| Traditional Format Income Statement | | |
| **Sales (5,600 units × $610 per unit)** |  | $ 3,416,000 |
| **Cost of goods sold (5,600 units × $408 per unit)** |  | 2,284,800 |
| **Gross margin** |  | 1,131,200 |
| **Selling and administrative expenses:** |  |  |
| **Selling expense ((5,600 units × $62 per unit) + $125,100)** | $ 472,300 |  |
| **Administrative expense ((5,600 units × $32 per unit) + $207,000)** | 386,200 | 858,500 |
| **Net operating income** |  | $ 272,700 |
| Contribution Format Income Statement | | |
| **Sales (5,600 units × $610 per unit)** |  | $ 3,416,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold (5,600 units × $408 per unit)** | $ 2,284,800 |  |
| **Variable selling expense (5,600 units × $62 per unit)** | 347,200 |  |
| **Variable administrative expense (5,600 units × $32 per unit)** | 179,200 | 2,811,200 |
| **Contribution margin** |  | 604,800 |
| **Fixed expenses:** |  |  |
| **Fixed selling expense** | 125,100 |  |
| **Fixed administrative expense** | 207,000 | 332,100 |
| **Net operating income** |  | $ 272,700 |

Essay

|  |  |  |
| --- | --- | --- |
| Traditional Format Income Statement | | |
| **Sales (5,300 units × $590 per unit)** |  | $ 3,127,000 |
| **Cost of goods sold (5,300 units × $403 per unit)** |  | 2,135,900 |
| **Gross margin** |  | 991,100 |
| **Selling and administrative expenses:** |  |  |
| **Selling expense ((5,300 units × $58 per unit) + $124,400)** | $ 431,800 |  |
| **Administrative expense ((5,300 units × $22 per unit) + $206,300)** | 322,900 | 754,700 |
| **Net operating income** |  | $ 236,400 |
| Contribution Format Income Statement | | |
| **Sales (5,300 units × $590 per unit)** |  | $ 3,127,000 |
| **Variable expenses:** |  |  |
| **Cost of goods sold (5,300 units × $403 per unit)** | $ 2,135,900 |  |
| **Variable selling expense (5,300 units × $58 per unit)** | 307,400 |  |
| **Variable administrative expense (5,300 units × $22 per unit)** | 116,600 | 2,559,900 |
| **Contribution margin** |  | 567,100 |
| **Fixed expenses:** |  |  |
| **Fixed selling expense** | 124,400 |  |
| **Fixed administrative expense** | 206,300 | 330,700 |
| **Net operating income** |  | $ 236,400 |

Essay

|  |  |  |
| --- | --- | --- |
| Contribution Format Income Statement | | |
| **Sales (4,800 units × $269 per unit)** |  | $ 1,291,200 |
| **Variable expenses:** |  |  |
| **Cost of goods sold (4,800 units × $114 per unit)** | $ 547,200 |  |
| **Variable selling expense (4,800 units × $6 per unit)** | 28,800 |  |
| **Variable administrative expense (4,800 units × $14 per unit)** | 67,200 | 643,200 |
| **Contribution margin** |  | 648,000 |
| **Fixed expenses:** |  |  |
| **Fixed selling expense** | 38,100 |  |
| **Fixed administrative expense** | 59,900 | 98,000 |
| **Net operating income** |  | $ 550,000 |
| Traditional Format Income Statement | | |
| **Sales (4,800 units × $269 per unit)** |  | $ 1,291,200 |
| **Cost of goods sold (4,800 units × $114 per unit)** |  | 547,200 |
| **Gross margin** |  | 744,000 |
| **Selling and administrative expenses:** |  |  |
| **Selling expense ((4,800 units × $6 per unit) + $38,100)** | $ 66,900 |  |
| **Administrative expense ((4,800 units × $14 per unit) + $59,900)** | 127,100 | 194,000 |
| **Net operating income** |  | $ 550,000 |

Essay

|  |  |  |
| --- | --- | --- |
| Traditional Format Income Statement | | |
| **Sales** |  | $ 2,296,200 |
| **Cost of goods sold** |  | 997,600 |
| **Gross margin** |  | 1,298,600 |
| **Selling and administrative expenses:** |  |  |
| **Selling expense** | $ 143,100 |  |
| **Administrative expense** | 191,100 | 334,200 |
| **Net operating income** |  | $ 964,400 |
| Contribution Format Income Statement | | |
| **Sales** |  | $ 2,296,200 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 997,600 |  |
| **Variable selling expense** | 86,000 |  |
| **Variable administrative expense** | 43,000 | 1,126,600 |
| **Contribution margin** |  | 1,169,600 |
| **Fixed expenses:** |  |  |
| **Fixed selling expense** | 57,100 |  |
| **Fixed administrative expense** | 148,100 | 205,200 |
| **Net operating income** |  | $ 964,400 |

Essay

|  |  |  |
| --- | --- | --- |
| Contribution Format Income Statement | | |
| **Sales** |  | $ 4,069,800 |
| **Variable expenses:** |  |  |
| **Cost of goods sold** | $ 2,351,100 |  |
| **Variable selling expense** | 204,000 |  |
| **Variable administrative expense** | 102,000 | 2,657,100 |
| **Contribution margin** |  | 1,412,700 |
| **Fixed expenses:** |  |  |
| **Fixed selling expense** | 117,700 |  |
| **Fixed administrative expense** | 267,000 | 384,700 |
| **Net operating income** |  | $ 1,028,000 |
| Traditional Format Income Statement | | |
| **Sales** |  | $ 4,069,800 |
| **Cost of goods sold** |  | 2,351,100 |
| **Gross margin** |  | 1,718,700 |
| **Selling and administrative expenses:** |  |  |
| **Selling expense** | $ 321,700 |  |
| **Administrative expense** | 369,000 | 690,700 |
| **Net operating income** |  | $ 1,028,000 |

Essay

Wages of carpenters on a home building site; A particular home; Direct

Cost of wiring used in making a personal computer; A particular personal computer; Indirect

Manager's salary at a hotel run by a chain of hotels; A particular hotel guest; Indirect

Manager's salary at a hotel run by a chain of hotels; The particular hotel; Direct

Cost of aluminum mast installed in a yacht at a yacht manufacturer; A particular yacht; Direct

Monthly lease cost of X-ray equipment at a hospital; The Radiology (X-Ray) Department; Direct

Cost of screws used to secure wood trim in a yacht at a yacht manufacturer; A particular yacht; Indirect

Cost of electronic navigation system installed in a yacht at a yacht manufacturer; A particular yacht; Direct

Cost of a replacement battery installed in a car at the auto repair shop of an automobile dealer; The auto repair shop; Direct

Cost of a measles vaccine administered at an outpatient clinic at a hospital; A particular patient; Direct

Essay

Product costs consist of direct materials, direct labor, and manufacturing overhead:

|  |  |  |
| --- | --- | --- |
| **Direct materials** |  | $ 181,000 |
| **Direct labor** |  | 120,000 |
| **Manufacturing overhead:** |  |  |
| **Utilities, factory** | $ 10,000 |  |
| **Indirect labor** | 32,000 |  |
| **Depreciation of production equipment** | 28,000 | 70,000 |
| **Total product cost** |  | $ 371,000 |

|  |  |
| --- | --- |
| **Sales commissions** | $ 69,000 |
| **Administrative salaries** | 99,000 |
| **Advertising** | 75,000 |
| **Depreciation of administrative equipment** | 49,000 |
| **Total period cost** | $ 292,000 |

Essay

Product costs consist of direct materials, direct labor, and manufacturing overhead:

|  |  |  |
| --- | --- | --- |
| **Direct materials** |  | $ 197,000 |
| **Direct labor** |  | 78,000 |
| **Manufacturing overhead:** |  |  |
| **Property taxes, factory** | $ 8,000 |  |
| **Indirect labor** | 31,000 |  |
| **Depreciation of production equipment** | 39,000 | 78,000 |
| **Total product cost** |  | $ 353,000 |

|  |  |
| --- | --- |
| **Marketing salaries** | $ 39,000 |
| **Administrative travel** | 102,000 |
| **Sales commissions** | 73,000 |
| **Advertising** | 145,000 |
| **Total period cost** | $ 359,000 |

Essay

Salary of production manager at a surfboard manufacturer; Surfboards produced; Fixed

Cost of solder used in making computers; Computers produced; Variable

Cost of dough used at a pizza shop; Pizzas cooked; Variable

Janitorial wages at a surfboard manufacturer; Surfboards produced; Fixed

Salary of the controller at a hospital; Number of patients; Fixed

Cost of sales at an electronics store; Dollar sales; Variable

Cost of testing materials used in a medical lab; Tests run; Variable

Cost of heating an electronics store; Dollar sales; Fixed

Cost of electricity for production equipment at a surfboard manufacturer; Surfboards produced; Variable

Depreciation on shelving at a book store; Dollar sales; Fixed

Essay

Variable cost = $125,188 ÷ 6,800 units = $18.41 per unit

|  |  |
| --- | --- |
| **Activity level** | 7,100 |
| **Total cost:** |  |
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| **Cost per unit:** |  |
| **Variable cost (d)** | $ 18.41 |
| **Fixed cost (e) [$164,152 ÷ 7,100 units]** | 23.12 |
| **Total (f)** | $ 41.53 |

Essay

Variable cost = $174,504 ÷ 2,400 units = $72.71 per unit

|  |  |
| --- | --- |
| **Activity level** | 2,700 |
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| **Variable cost (a) [2,700 units × $72.71 per unit]** | $ 196,317 |
| **Fixed cost (b)** | 55,080 |
| **Total (c)** | $ 251,397 |
| **Cost per unit:** |  |
| **Variable cost (d)** | $ 72.71 |
| **Fixed cost (e) [$55,080 ÷ 2,700 units]** | 20.40 |
| **Total (f)** | $ 93.11 |

Essay

Cost of vaccine used at a clinic; Vaccines administered; Variable

Building rent at a taco shop; Dollar sales; Fixed

Salary of production manager at a snowboard manufacturer; Snowboards produced; Fixed

Cost of electricity for production equipment at a snowboard manufacturer; Snowboards produced; Variable

Ferry captain's salary on a regularly scheduled passenger ferry; Number of passengers; Fixed

Cost of glue used in furniture production; Units produced; Variable

Janitorial wages at a snowboard manufacturer; Snowboards produced; Fixed

Depreciation on factory building at a snowboard manufacturer; Snowboards produced; Fixed

Cost of advertising at a snowboard company; Snowboards sold; Fixed

Cost of shipping bags of fertilizer to a customer at a chemical plant; Bags shipped; Variable