

Student name: _____

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

Which of the following statements are true?

1. A factory supervisor's salary would be classified as an indirect cost with respect to a unit of product.
2. A direct cost is a cost that can be easily traced to the particular cost object under consideration.
3. A cost can be direct or indirect. The classification can change if the cost object changes.

Only statement I one is true.

Statements I one and II are true.

All of the statements are true.

None of the statements are true.

Which of the following statements are true?

1. Wages paid to production supervisors would be classified as manufacturing overhead.
2. Indirect costs, such as manufacturing overhead, are variable costs.
3. Selling costs are indirect costs.
4. Administrative costs are indirect costs.

Only statement I one is true.

Statements I one and III are true.

All statements are true.

None of the statements are true.

Which of the following statements are true?

1. The sum of all manufacturing costs except for direct materials and direct labor is called manufacturing overhead.
2. The three cost elements ordinarily included in product costs are direct materials, direct labor, and manufacturing overhead.

Only statement I one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. Depreciation is always considered a period cost for external financial reporting purposes in a manufacturing company.
2. Depreciation on equipment a company uses in its selling and administrative activities would be classified as a period cost.

Only statement Ione is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. Conversion cost is the sum of direct labor cost and manufacturing overhead cost.
2. Conversion cost is the same thing as manufacturing overhead.
3. Conversion cost equals product cost less direct materials cost.

Only statement Ione is true.

Statements Ione and III are true.

All statements are true.

None of the statements are true.

Which of the following statements are true?

1. In a manufacturing company, all costs are period costs.
2. Selling and administrative expenses are period costs under generally accepted accounting principles.
3. The cost of shipping parts from a supplier is considered a period cost.

Only statement Ione is true.

Only statement II is true.

Statements Ione and II are true.

Statements Ione and III are true.

Which of the following statements are true?

1. Advertising is not a considered a product cost even if it promotes a specific product.
2. Product costs are also known as inventoriable costs.
3. Prime cost is the sum of direct materials cost and direct labor cost.
4. Prime cost equals manufacturing overhead cost.

Only statement I one is true.

Both statements I one and IV four are true.

Statements I one, II, and III are true.

None of the statements are true.

Which of the following statements are true?

1. If the activity level increases, then one would expect the fixed cost per unit to increase as well.
2. A fixed cost is a cost whose cost per unit varies as the activity level rises and falls.
3. 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 one and II are true.

Statements I one and III are true.

Which of the following statements are true?

1. Cost behavior is considered curvilinear whenever a straight line is a reasonable approximation for the relation between cost and activity.
2. As activity decreases within the relevant range, fixed costs remain constant on a per unit basis.
3. 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 one is true.

Only statement II is true.

Only statement III is true.

All statements are true.

Which of the following statements are true?

1. The variable cost per unit depends on how many units are produced.
2. 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 one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. 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.
2. Fixed costs expressed on a per unit basis do not change with changes in activity.
3. Committed fixed costs remain largely unchanged in the short run.

Only statement I one is true.

Only statement II is true.

Only statement III is true.

All statements are true.

Which of the following statements are true?

1. Within the relevant range, a change in activity results in a change in variable cost per unit and total fixed cost.
2. The concept of the relevant range does not apply to variable costs.

Only statement I one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. 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.
2. 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.
3. Committed fixed costs represent organizational investments with a one-year planning horizon.
4. 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 one and II are true.

Both statement II and IV four are true.

All statements are true.

Which of the following statements are true?

1. A fixed cost fluctuates in total as activity changes but remains constant on a per unit basis over the relevant range.
2. The relevant range is the range of activity within which the assumption that cost behavior is strictly linear is reasonably valid.

Only statement I one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. Variable costs per unit are not affected by changes in activity.
2. The relevant range concept is applicable to mixed costs.
3. A variable cost remains constant if expressed on a unit basis.
4. A fixed cost is not constant per unit of product.

Only statement III is true.

Both statement I one and II are true.

Both statement II and IV four are true.

All statements are true.

Which of the following statements are true?

1. Differential costs can only be variable.
2. The potential benefit that is given up when one alternative is selected over another is called a sunk cost.
3. 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 one is true.

Only statement II is true.

Only statement III is true.

All statements are true.

Which of the following statements are true?

1. Opportunity costs at a manufacturing company are not part of manufacturing overhead.
2. A cost that differs from one month to another is known as a sunk cost.

Only statement I one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. In a traditional format income statement, the gross margin is sales minus cost of goods sold.
2. In a traditional format income statement, the gross margin minus selling and administrative expenses equals net operating income.

Only statement I one is true.

Only statement II is true.

Both of the statements are true.

Neither of the statements are true.

Which of the following statements are true?

1. 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.
2. Traditional format income statements are widely used for preparing external financial statements.
3. 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 Ione is true.

Only statement II is true.

Both statements Ione and III are true.

Both statements II and III are true.

Which of the following statements are true?

1. 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.
2. Contribution format income statements are prepared primarily for external reporting purposes.
3. Most companies use the contribution approach in preparing financial statements for external reporting purposes.

Only statement Ione is true.

Both statementsIone and III are true.

All of the statements are true.

None of the statements are true.

Which of the following statements are true?

1. Contribution margin and gross margin mean the same thing.
2. 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.
3. 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.

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.

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.

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.

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

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

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.

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.

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.

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.

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

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.

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

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

Product costs that have become expenses can be found in:

period costs.

selling expenses.

cost of goods sold.

administrative expenses.

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

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

Direct materials.

Direct labor.

Variable overhead.

Fixed overhead.

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.

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.

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.

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.

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		

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		

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.

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.

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

product cost.

opportunity cost.

period cost.

variable cost.

Factory overhead is typically a(n):

mixed cost.

fixed cost.

variable cost.

irrelevant cost.

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

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

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.

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.

An example of a committed fixed cost is:

management training seminars.

a long-term equipment lease.

research and development.

advertising.

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

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.

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.

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		

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.

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.

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.

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

Variable.

Fixed.

Mixed.

Step-variable.

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.

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.

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

An example of a committed fixed cost would be:

taxes on real estate.

management development programs.

public relations costs.

advertising programs.

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

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.

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.

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.

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.

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.

Differential costs can:

only be fixed costs.

only be variable costs.

be either fixed or variable.

be sunk costs.

All of the following can be differential costs except:

variable costs.

sunk costs.

opportunity costs.

fixed costs.

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.

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

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

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

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

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

The following costs were incurred in May:

Direct materials	\$ 41,400
Direct labor	\$ 29,800
Manufacturing overhead	\$ 24,300
Selling expenses	\$ 19,700
Administrative expenses	\$ 34,500

Conversion costs during the month totaled:

\$54,100

\$65,700

\$149,700

\$71,200

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

Abburi Company's manufacturing overhead is 45% of its total conversion costs. If direct labor is \$77,550 and if direct materials are \$29,000, the manufacturing overhead is:

\$63,450

\$94,783

\$23,727

\$87,177

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

During the month of May, direct labor cost totaled \$11,515 and direct labor cost was 35% of prime cost. If total manufacturing costs during May were \$82,600, the manufacturing overhead was:

\$21,385

\$32,900

\$71,085

\$49,700

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

In May direct labor was 40% of conversion cost. If the manufacturing overhead for the month was \$75,000 and the direct materials cost was \$27,200, the direct labor cost was:

\$112,500

\$50,000

\$40,800

\$18,133

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

The following costs were incurred in May:

Direct materials	\$ 45,100
Direct labor	\$ 32,300
Manufacturing overhead	\$ 26,700
Selling expenses	\$ 17,900
Administrative expenses	\$ 34,100

Prime costs during the month totaled:

\$104,100

\$156,100

\$77,400

\$59,000

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

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

Perteet Corporation's relevant range of activity is 6,300 units to 12,500 units. When it produces and sells 9,400 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 7.20
Direct labor	\$ 3.65
Variable manufacturing overhead	\$ 1.70
Fixed manufacturing overhead	\$ 2.90
Fixed selling expense	\$ 0.65
Fixed administrative expense	\$ 0.35
Sales commissions	\$ 0.45
Variable administrative expense	\$ 0.50

If 7,000 units are produced, the total amount of manufacturing overhead cost is closest to:

\$28,520

\$49,890

\$39,160

\$22,010

Pertect 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

A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is \$5,190 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)	\$ 173	\$ 1,557
B)	\$ 1,730	\$ 0
C)	\$ 0	\$ 1,730
D)	\$ 1,557	\$ 173

Choice A

Choice B

Choice C

Choice D

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

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

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

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

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

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

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

At an activity level of 8,600 machine-hours in a month, Falks Corporation's total variable production engineering cost is \$734,440 and its total fixed production engineering cost is \$154,000. 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.

\$100.96

\$103.31

\$102.90

\$101.44

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

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

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

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

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

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

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

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

Paolucci Corporation's relevant range of activity is 8,100 units to 16,500 units. When it produces and sells 12,300 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 7.05
Direct labor	\$ 3.95
Variable manufacturing overhead	\$ 1.95
Fixed manufacturing overhead	\$ 3.40
Fixed selling expense	\$ 1.25
Fixed administrative expense	\$ 0.95
Sales commissions	\$ 1.20
Variable administrative expense	\$ 0.85

If 11,300 units are sold, the variable cost per unit sold is closest to:

\$20.60

\$12.95

\$16.35

\$15.00

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

Schonhardt Corporation's relevant range of activity is 2,600 units to 7,000 units. When it produces and sells 4,800 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 7.15
Direct labor	\$ 3.30
Variable manufacturing overhead	\$ 1.20
Fixed manufacturing overhead	\$ 2.50
Fixed selling expense	\$ 0.80
Fixed administrative expense	\$ 0.50
Sales commissions	\$ 0.60
Variable administrative expense	\$ 0.50

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

\$20,640

\$15,840

\$16,320

\$12,000

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

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

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

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

Tirri Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 7.55	
Direct labor	\$ 3.95	
Variable manufacturing overhead	\$ 1.60	
Fixed manufacturing overhead		\$ 24,500
Sales commissions	\$ 1.10	
Variable administrative expense	\$ 0.65	
Fixed selling and administrative expense		\$ 8,900

If the selling price is \$28.20 per unit, the contribution margin per unit sold is closest to:

\$13.35

\$8.15

\$16.70

\$10.05

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

Macy Corporation's relevant range of activity is 4,200 units to 10,000 units. When it produces and sells 7,100 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 4.85
Direct labor	\$ 3.30
Variable manufacturing overhead	\$ 1.30
Fixed manufacturing overhead	\$ 3.70
Fixed selling expense	\$ 1.25
Fixed administrative expense	\$ 0.80
Sales commissions	\$ 1.20
Variable administrative expense	\$ 0.70

If the selling price is \$25.50 per unit, the contribution margin per unit sold is closest to:

\$9.45

\$6.80

\$17.35

\$14.15

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

Bellucci Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 6.80	
Direct labor	\$ 3.70	
Variable manufacturing overhead	\$ 1.30	
Fixed manufacturing overhead		\$ 113,050
Sales commissions	\$ 1.25	
Variable administrative expense	\$ 0.60	
Fixed selling and administrative expense		\$ 40,850

The incremental manufacturing cost that the company will incur if it increases production from 9,500 to 9,501 units is closest to (assume that the increase is within the relevant range):
\$25.60

\$11.80

\$29.85

\$23.70

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

Fiori Corporation's relevant range of activity is 4,100 units to 10,500 units. When it produces and sells 7,300 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 6.40
Direct labor	\$ 3.70
Variable manufacturing overhead	\$ 2.10
Fixed manufacturing overhead	\$ 2.50
Fixed selling expense	\$ 0.85
Fixed administrative expense	\$ 0.75
Sales commissions	\$ 1.15
Variable administrative expense	\$ 0.65

The incremental manufacturing cost that the company will incur if it increases production from 9,500 to 9,501 units is closest to:

\$18.10

\$12.20

\$14.70

\$15.55

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

Haack Incorporated is a merchandising company. Last month the company's cost of goods sold was \$68,200. The company's beginning merchandise inventory was \$14,800 and its ending merchandise inventory was \$26,300. What was the total amount of the company's merchandise purchases for the month?

\$68,200

\$56,700

\$79,700

\$109,300

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

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

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

Corporate headquarters building lease	\$ 86,200
Cosmetics Department sales commissions-Northridge Store	\$ 5,560
Corporate legal office salaries	\$ 66,800
Store manager's salary-Northridge Store	\$ 19,100
Heating-Northridge Store	\$ 14,300
Cosmetics Department cost of sales-Northridge Store	\$ 32,000
Central warehouse lease cost	\$ 8,800
Store security-Northridge Store	\$ 22,100
Cosmetics Department manager's salary-Northridge Store	\$ 4,790

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?

\$97,850

\$42,350

\$37,560

\$32,000

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

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

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

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

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

Dake Corporation's relevant range of activity is 2,300 units to 5,500 units. When it produces and sells 3,900 units, its average costs per unit are as follows: For financial reporting purposes, the total amount of product costs incurred to make 3,900 units is closest to:

	Average Cost per Unit
Direct materials	\$ 6.80
Direct labor	\$ 4.00
Variable manufacturing overhead	\$ 1.55
Fixed manufacturing overhead	\$ 2.50
Fixed selling expense	\$ 1.15
Fixed administrative expense	\$ 0.85
Sales commissions	\$ 0.95
Variable administrative expense	\$ 0.85
\$57,915	
\$48,165	
\$61,815	
\$9,750	

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

	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
\$56,200	
\$45,800	
\$60,200	
\$10,400	

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

	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
\$7,800	
\$8,100	
\$4,400	
\$12,200	

Dake Corporation's relevant range of activity is 2,300 units to 5,500 units. When it produces and sells 3,900 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 6.80
Direct labor	\$ 4.00
Variable manufacturing overhead	\$ 1.55
Fixed manufacturing overhead	\$ 2.50
Fixed selling expense	\$ 1.15
Fixed administrative expense	\$ 0.85
Sales commissions	\$ 0.95
Variable administrative expense	\$ 0.85
If 2,900 units are produced, the total amount of direct manufacturing cost incurred is closest to:	
\$31,320	
\$35,815	
\$43,065	

\$39,875

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

Dake Corporation's relevant range of activity is 2,000 units to 5,000 units. When it produces and sells 3,500 units, its average costs per unit are as follows:

	Average Cost per Unit
Direct materials	\$ 6.75
Direct labor	\$ 3.90
Variable manufacturing overhead	\$ 1.50
Fixed manufacturing overhead	\$ 4.00
Fixed selling expense	\$ 1.10
Fixed administrative expense	\$ 0.80
Sales commissions	\$ 0.90
Variable administrative expense	\$ 0.80

If 2,500 units are produced, the total amount of indirect manufacturing cost incurred is closest to:

\$3,750

\$14,000

\$17,750

\$13,750

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

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

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

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

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

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

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

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

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

Schwiesow Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 7.95	
Direct labor	\$ 4.10	
Variable manufacturing overhead	\$ 1.55	
Fixed manufacturing overhead		\$ 16,500
Sales commissions	\$ 1.00	
Variable administrative expense	\$ 0.30	
Fixed selling and administrative expense		\$ 6,700

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

\$21,300

\$25,800

\$16,800

\$38,400

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Kesterson Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 6.80	
Direct labor	\$ 3.50	
Variable manufacturing overhead	\$ 1.75	
Fixed manufacturing overhead		\$ 27,500
Sales commissions	\$ 1.40	
Variable administrative expense	\$ 0.40	
Fixed selling and administrative expense		\$ 7,700

The incremental manufacturing cost that the company will incur if it increases production from 11,000 to 11,001 units is closest to:

\$12.05

\$15.65

\$17.05

\$14.55

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

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	\$ 81,000
Wages paid to the sales manager's secretary	\$ 33,000
Cost of junk mail advertising	\$ 50,000

What is the total of the direct costs above?

\$65,000

\$114,000

\$146,000

\$196,000

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

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	\$ 77,000
Wages paid to the workers who paint the figurines	\$ 87,000
Wages paid to the sales manager's secretary	\$ 39,000
Cost of junk mail advertising	\$ 56,000

What is the total of the product costs above?

\$0

\$95,000

\$164,000

\$182,000

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

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	\$ 69,000
Wages paid to the workers who paint the figurines	\$ 83,000
Wages paid to the sales manager's secretary	\$ 35,000
Cost of junk mail advertising	\$ 52,000

What is the total of the conversion costs above?

\$69,000

\$87,000

\$83,000

\$152,000

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

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

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

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

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

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

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

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

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

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

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

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

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

Rhyme 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

Rhyme 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

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

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

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

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

Pedregon Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 6.65	
Direct labor	\$ 3.70	
Variable manufacturing overhead	\$ 1.45	
Fixed manufacturing overhead		\$ 25,900
Sales commissions	\$ 0.65	
Variable administrative expense	\$ 0.70	
Fixed selling and administrative expense		\$ 4,800

If 7,000 units are sold, the total variable cost is closest to:

\$102,900

\$123,200

\$92,050

\$82,600

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

Pedregon Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 6.80	
Direct labor	\$ 4.00	
Variable manufacturing overhead	\$ 1.60	
Fixed manufacturing overhead		\$ 12,000
Sales commissions	\$ 0.80	
Variable administrative expense	\$ 0.85	
Fixed selling and administrative expense		\$ 5,700

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

\$16,800

\$12,000

\$15,300

\$21,600

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

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

\$4.05

\$6.00

\$7.75

\$10.40

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

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

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

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

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

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

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

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

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

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

Lagle Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 4.70	
Direct labor	\$ 3.60	
Variable manufacturing overhead	\$ 1.40	
Fixed manufacturing overhead		\$ 16,900
Sales commissions	\$ 1.60	
Variable administrative expense	\$ 0.50	
Fixed selling and administrative expense		\$ 3,000

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

\$16,650

\$13,650

\$3,000

\$16,900

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

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	\$ 0.55	
Fixed selling and administrative expense		\$ 6,000

If 6,500 units are sold, the variable cost per unit sold is closest to:
\$18.30

\$14.10

\$11.35

\$14.05

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

Lagle Corporation has provided the following information:

	Cost per Unit	Cost per Period
Direct materials	\$ 5.20	
Direct labor	\$ 3.80	
Variable manufacturing overhead	\$ 1.35	
Fixed manufacturing overhead		\$ 7,600
Sales commissions	\$ 1.70	
Variable administrative expense	\$ 0.30	
Fixed selling and administrative expense		\$ 5,000

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

\$41,400

\$63,800

\$49,400

\$49,600

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

At a sales volume of 38,000 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total \$528,200.

To the nearest whole dollar, what should be the total sales commissions at a sales volume of 34,500 units? (Assume that this sales volume is within the relevant range.)

Note: Round intermediate calculations to 2 decimal places.

\$503,875

\$528,200

\$479,550

\$581,786

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

At a sales volume of 38,000 units, Choice Corporation's sales commissions (a cost that is variable with respect to sales volume) total \$528,200.

To the nearest whole cent, what should be the average sales commission per unit at a sales volume of 45,400 units? (Assume that this sales volume is within the relevant range.)

\$13.90

\$12.63

\$15.31

\$11.63

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

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

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

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

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

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

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

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

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

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

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

Erkkila Incorporated reports that at an activity level of 6,800 machine-hours in a month, its total variable inspection cost is \$426,530 and its total fixed inspection cost is \$197,309.

What would be the average fixed inspection cost per unit at an activity level of 7,100 machine-hours in a month? Assume that this level of activity is within the relevant range.

\$91.74

\$29.02

\$34.94

\$27.79

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

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

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	\$ 4.60
Direct labor	\$ 4.20
Variable manufacturing overhead	\$ 1.40
Fixed manufacturing overhead	\$ 8.00
Fixed selling expense	\$ 3.20
Fixed administrative expense	\$ 1.70
Sales commissions	\$ 0.70
Variable administrative expense	\$ 0.65

If the selling price is \$23.00 per unit, the contribution margin per unit sold is closest to:

\$11.45

(\$1.45)

\$4.80

\$14.20

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

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

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		<u>240,000</u>
Selling and administrative expenses:		
Selling	\$	
	100,000	
Administrative	110,000	210,000
Net operating income		<u>\$ 30,000</u>

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

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

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:

$$Y = \$105,000 + \$3X$$

$$Y = \$105,000 + \$5X$$

$$Y = \$110,000 + \$5X$$

$$Y = \$110,000 + \$33X$$

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

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		\$ 910,000
Cost of goods sold		560,000
Gross margin		350,000
Selling and administrative expenses		
Selling	\$	
	119,000	
Administrative	142,000	261,000
Net operating income		\$ 89,000

On average, a book sells for \$65. 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 contribution margin for Sam's Bookstore for the first quarter is:

\$294,000

\$826,700

\$266,700

\$643,300

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

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 net operating income using the contribution approach for the first quarter is:

\$315,000

\$216,000

\$166,500

\$84,000

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

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		\$ 910,000
Cost of goods sold		530,000
Gross margin		380,000
Selling and administrative expenses		
Selling	\$	
	113,000	
Administrative	130,000	243,000
Net operating income		\$ 137,000

On average, a book sells for \$70. Variable selling expenses are \$5 per book with the remaining selling expenses being fixed. The variable administrative expenses are 3% 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:

$$Y = \$164,300 + \$5.00X$$

$$Y = \$164,300 + \$7.10X$$

$$Y = \$150,700 + \$7.10X$$

$$Y = \$150,700 + \$9.20X$$

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:

$$Y = \$102,000 + \$5X$$

$$Y = \$102,000 + \$7X$$

$$Y = \$78,000 + \$7X$$

$$Y = \$78,000 + \$9X$$

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

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

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

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

Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing \$536,000 or a new model 220 machine costing \$463,000 to replace a machine that was purchased 9 years ago for \$484,000. 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 \$463,000 in the new machine, the money could be invested in a project that would return a total of \$488,000.

In making the decision to buy the model 220 machine rather than the model 370 machine, the sunk cost was:

\$484,000

\$463,000

\$536,000

\$488,000

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

Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing \$538,000 or a new model 220 machine costing \$476,000 to replace a machine

that was purchased 8 years ago for \$504,000. 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 \$476,000 in the new machine, the money could be invested in a project that would return a total of \$34,000.

In making the decision to buy the model 220 machine rather than the model 370 machine, the differential cost was:

\$62,000

\$28,000

\$34,000

\$24,000

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

Management of Plascencia Corporation is considering whether to purchase a new model 370 machine costing \$443,000 or a new model 220 machine costing \$404,000 to replace a machine that was purchased 12 years ago for \$411,000. 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 \$404,000 in the new machine, the money could be invested in a project that would return a total of \$432,000.

In making the decision to invest in the model 220 machine, the opportunity cost was:

\$411,000

\$404,000

\$443,000

\$432,000

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

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

Sales	\$ 433,000
Cost of goods sold (all variable)	\$ 176,100
Total variable selling expense	\$ 26,700
Total fixed selling expense	\$ 19,700
Total variable administrative expense	\$ 8,700
Total fixed administrative expense	\$ 37,300

The gross margin for October is:

\$221,500

\$256,900

\$164,500

\$376,000

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

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

Sales	\$ 467,000
Cost of goods sold (all variable)	\$ 173,200
Total variable selling expense	\$ 19,500
Total fixed selling expense	\$ 17,500
Total variable administrative expense	\$ 10,100
Total fixed administrative expense	\$ 34,000

The contribution margin for October is:

\$264,200

\$415,500

\$293,800

\$212,700

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

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

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

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

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

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

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

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

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.

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.

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:

- What is the total amount of product cost listed above?
- What is the total amount of period cost listed above?

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:

- What is the total amount of product cost listed above?
- What is the total amount of period cost listed above?

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.

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:

- The total variable cost
- The total fixed cost
- The total cost
- The average variable cost per unit
- The average fixed cost per unit
- The average total cost per unit.

Assume that this activity level is within the relevant range.

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
- f. The average total cost per unit.

Assume that this activity level is within the relevant range.

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: Ch1 Algorithmic and Static_Managerial Accounting for
Managers_6e

C

A

C

B

B

B

C

A

C

B

C

D

C

B

D

C

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A

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C

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A

C

B

D

B

C

D

C

B

B

B

D

Direct materials	\$ 5.20
Direct labor	3.75
Direct manufacturing cost per unit (a)	<u>\$ 8.95</u>
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)	<u>\$ 7.90</u>
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	<u><u>\$ 134,300</u></u>

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 asterik)	15,000
Total indirect manufacturing cost	<u><u>\$ 22,800</u></u>

*

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

A

$$\text{Conversion cost} = \text{Direct labor} + \text{Manufacturing overhead} = \$29,800 + \$24,300 = \$54,100$$

C

$$\text{Conversion cost} = \text{Direct labor} + \text{Manufacturing overhead} = \$13,000 + \$46,000 = \$59,000$$

A

$$\text{Manufacturing overhead} = 0.45 \times \text{Conversion cost}$$

$$\text{Direct labor} = \$77,550$$

$$\text{Conversion cost} = \text{Direct labor} + \text{Manufacturing overhead}$$

$$\text{Conversion cost} = \$77,550 + \text{Manufacturing overhead}$$

$$\text{Conversion cost} = \$77,550 + (0.45 \times \text{Conversion cost})$$

$$0.55 \times \text{Conversion cost} = \$77,550$$

$$\text{Conversion cost} = \$77,550 \div 0.55 = \$141,000$$

$$\text{Manufacturing overhead} = 0.45 \times \text{Conversion cost}$$

$$\text{Manufacturing overhead} = 0.45 \times \$141,000 = \$63,450$$

B

$$\text{Manufacturing overhead} = 0.60 \times \text{Conversion cost}$$

$$\text{Direct labor} = \$52,000$$

$$\text{Conversion cost} = \text{Direct labor} + \text{Manufacturing overhead}$$

$$\text{Conversion cost} = \$52,000 + \text{Manufacturing overhead}$$

$$\text{Conversion cost} = \$52,000 + (0.60 \times \text{Conversion cost})$$

$$0.40 \times \text{Conversion cost} = \$52,000$$

$$\text{Conversion cost} = \$52,000 \div 0.40 = \$130,000$$

$$\text{Manufacturing overhead} = 0.60 \times \text{Conversion cost}$$

$$\text{Manufacturing overhead} = 0.60 \times \$130,000 = \$78,000$$

D

$$\text{Direct labor cost} = \$11,515$$

$$\text{Direct labor cost} = 0.35 \times \text{Prime cost}$$

$$\text{Total manufacturing cost} = \$82,600$$

$$\text{Direct labor cost} = 0.35 \times \text{Prime cost}$$

$$\text{Prime cost} = \text{Direct labor cost} \div 0.35$$

$$\text{Prime cost} = \$11,515 \div 0.35 = \$32,900$$

$$\text{Total manufacturing cost} = \text{Prime cost} + \text{Manufacturing overhead cost}$$

$$\$82,600 = \$32,900 + \text{Manufacturing overhead cost}$$

$$\text{Manufacturing overhead cost} = \$49,700$$

C

Direct labor cost = \$10,000

Direct labor cost = $0.40 \times \text{Prime cost}$

Total manufacturing cost = \$86,000

Direct labor cost = $0.40 \times \text{Prime cost}$

Prime cost = Direct labor cost $\div 0.40$

Prime cost = $\$10,000 \div 0.40 = \$25,000$

Total manufacturing cost = Prime cost + Manufacturing overhead cost

$\$86,000 = \$25,000 + \text{Manufacturing overhead cost}$

Manufacturing overhead cost = \$61,000

B

Direct labor = $0.40 \times \text{Conversion cost}$

Manufacturing overhead = \$75,000

Conversion cost = Direct labor + Manufacturing overhead

Conversion cost = Direct labor + \$75,000

Conversion cost = $(0.40 \times \text{Conversion cost}) + \$75,000$

$0.60 \times \text{Conversion cost} = \$75,000$

Conversion cost = $\$75,000 \div 0.60$

Conversion cost = \$125,000

Direct labor = $0.40 \times \text{Conversion cost} = 0.40 \times \$125,000 = \$50,000$

C

Direct labor = $0.60 \times \text{Conversion cost}$

Manufacturing overhead = \$54,000

Conversion cost = Direct labor + Manufacturing overhead

Conversion cost = Direct labor + \$54,000

Conversion cost = $(0.60 \times \text{Conversion cost}) + \$54,000$

$0.40 \times \text{Conversion cost} = \$54,000$

Conversion cost = $\$54,000 \div 0.40$

Conversion cost = \$135,000

Direct labor = $0.60 \times \text{Conversion cost} = 0.60 \times \$135,000 = \$81,000$

C

Prime cost = Direct materials + Direct labor

$= \$45,100 + \$32,300 = \$77,400$

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	<u>\$ 138,000</u>

C

Total variable manufacturing overhead cost (\$1.70 per unit × 7,000 units)	\$ 11,900
Total fixed manufacturing overhead cost (\$2.90 per unit × 9,400 units*Footnote asterik)	27,260
Total manufacturing overhead cost	<u>\$ 39,160</u>

*Footnote asterikThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 9,400 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 asterik)	15,000
Total manufacturing overhead cost	<u>\$ 21,400</u>

*Footnote asterikThe 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 = \$5,190 ÷ 3 = \$1,730
 Portion applicable to product cost = 0.90 × \$1,730 = \$1,557
 Portion applicable to period cost = 0.10 × \$1,730 = \$173

B

Annual insurance expense = $\$2,100 \div 3 = \700

Portion applicable to product cost = $0.60 \times \$700 = \420

Portion applicable to period cost = $0.40 \times \$700 = \280

D

Sales commissions	\$ 0.50
Variable administrative expense	0.50
Variable selling and administrative expense per unit	<u>\$ 1.00</u>
Total variable selling and administrative expense (\$1.00 per unit × 9,000 units sold)	<u>\$ 9,000</u>
Total fixed selling and administrative expense	40,500
Total period (nonmanufacturing) cost	<u>\$ 49,500</u>

B

Sales commissions	\$ 0.50
Variable administrative expense	0.45
Variable selling and administrative expense per unit	<u>\$ 0.95</u>
Total variable selling and administrative expense (\$0.95 per unit × 5,000 units sold)	<u>\$ 4,750</u>
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	<u>\$ 12,250</u>

B

Direct materials	\$ 6.20
Direct labor	3.70
Variable manufacturing overhead	1.25
Variable manufacturing cost per unit	<u>\$ 11.15</u>
Total variable manufacturing cost (\$11.15 per unit × 5,000 units produced)	<u>\$ 55,750</u>
Total fixed manufacturing overhead cost	10,000
Total product (manufacturing) cost	<u>\$ 65,750</u>

D

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

A

Variable cost per unit = $\$919,116 \div 9,900 \text{ units} = \92.84 per unit

$$\begin{aligned}
 \text{Total cost} &= \text{Total fixed cost} + \text{Total variable cost} \\
 &= \$259,974 + (\$92.84 \text{ per unit} \times 10,100 \text{ units}) \\
 &= \$259,974 + \$937,684 \\
 &= \$1,197,658
 \end{aligned}$$

A

$$\begin{aligned}
 Y &= \$5,300 + (\$0.60 \text{ per unit} \times X) \\
 &= \$5,300 + (\$0.60 \text{ per unit} \times 8,000 \text{ hours}) \\
 &= \$5,300 + \$4,800 \\
 &= \$10,100
 \end{aligned}$$

C

Variable cost per machine-hour = $\$734,440 \div 8,600 \text{ machine-hours} = \$85.40 \text{ per machine-hour}$

Fixed cost per machine-hour at 8,800 machine-hours = $\$154,000 \div 8,800 \text{ machine-hours} = \$17.50 \text{ per machine-hour}$

$$\begin{aligned}
 \text{Total cost} &= \text{Variable cost} + \text{Fixed cost} \\
 &= \$85.40 \text{ per machine-hour} + \$17.50 \text{ per machine-hour} \\
 &= \$102.90 \text{ per machine-hour}
 \end{aligned}$$

D

Variable cost per machine-hour = $\$556,416 \div 7,200$ machine-hours = \$77.28 per machine-hour

Fixed cost per machine-hour at 7,300 machine-hours = $\$226,008 \div 7,300$ 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 asterik) (a)	\$ 12,000
Number of units produced (b)	5,000
Average fixed manufacturing cost per unit produced (a) ÷ (b)	<u>\$ 2.40</u>

*Footnote asterikThe 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	<u>\$ 13.50</u>

C

$$\begin{aligned}
 Y &= \$16,000 + (\$3.40 \text{ per unit} \times X) \\
 &= \$16,000 + (\$3.40 \text{ per unit} \times 4,000 \text{ units}) \\
 &= \$16,000 + \$13,600 \\
 &= \$29,600
 \end{aligned}$$

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	<u>\$ 33,700</u>

B

$$Y = \$23,000 + (\$8 \text{ per unit} \times 7,000 \text{ units})$$

$$Y = \$23,000 + \$56,000$$

$$Y = \$79,000$$

B

$$\text{Variable cost per unit} = \$697,284 \div 8,400 \text{ units} = \$83.01 \text{ per unit}$$

$$\text{Total cost} = \text{Total fixed cost} + \text{Total variable cost}$$

$$= \$464,100 + (\$83.01 \text{ per unit} \times 8,500 \text{ units})$$

$$= \$464,100 + \$705,585$$

$$= \$1,169,685$$

A

$$\text{Direct materials per unit} = \$17,000 \div 10,000 \text{ units} = \$1.70 \text{ per unit}$$

$$\text{Total direct materials cost in July} = \$1.70 \text{ per unit} \times 11,000 \text{ units} = \$18,700$$

$$\text{Fixed factory rent} = \$21,000 \text{ (given)}$$

$$\text{Total cost} = \text{Direct materials} + \text{Fixed factory rent} + \text{Other production costs}$$

$$\$61,300 = \$18,700 + \$21,000 + \text{Other production costs}$$

$$\text{Other production costs} = \$61,300 - (\$18,700 + \$21,000)$$

$$= \$61,300 - \$39,700$$

$$= \$21,600$$

D

Direct materials	\$ 7.05
Direct labor	3.95
Variable manufacturing overhead	1.95
Sales commissions	1.20
Variable administrative expense	0.85
Variable cost per unit sold	\$ 15.00

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	<u>\$ 12.50</u>

D

Fixed manufacturing overhead per unit	\$ 2.50
Number of units produced*Footnote asterik	4,800
Total fixed manufacturing overhead cost	<u>\$ 12,000</u>

*Footnote asterikThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 4,800 units.

D

Fixed manufacturing overhead per unit	\$ 2.80
Number of units produced*Footnote asterik	4,000
Total fixed manufacturing overhead cost	<u>\$ 11,200</u>

*Footnote asterikThe 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	<u>\$ 13.25</u>
Variable cost per unit sold (a)	<u>\$ 13.25</u>
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		\$ 28.20
Direct materials	\$ 7.55	
Direct labor	3.95	
Variable manufacturing overhead	1.60	
Sales commissions	1.10	
Variable administrative expense	0.65	
Variable cost per unit sold		14.85
Contribution margin per unit		
		\$ 13.35

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		\$ 25.50
Direct materials	\$ 4.85	
Direct labor	3.30	
Variable manufacturing overhead	1.30	
Sales commissions	1.20	
Variable administrative expense	0.70	
Variable cost per unit sold		11.35
Contribution margin per unit		\$ 14.15

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	\$ 6.80
Direct labor	3.70
Variable manufacturing overhead	1.30
Incremental manufacturing cost	\$ 11.80

B

Direct materials	\$ 7.10
Direct labor	3.95
Variable manufacturing overhead	1.75
Incremental manufacturing cost	<u>\$ 12.80</u>

B

Direct materials	\$ 6.40
Direct labor	3.70
Variable manufacturing overhead	2.10
Incremental manufacturing cost	<u>\$ 12.20</u>

B

Direct materials	\$ 6.05
Direct labor	3.05
Variable manufacturing overhead	1.70
Incremental manufacturing cost	<u>\$ 10.80</u>

C

Cost of goods sold = Beginning merchandise inventory + Purchases – Ending merchandise inventory

$$\$68,200 = \$14,800 + \text{Purchases} - \$26,300$$

$$\text{Purchases} = \$68,200 - \$14,800 + \$26,300 = \$79,700$$

B

Cost of goods sold = Beginning merchandise inventory + Purchases – Ending merchandise inventory

$$\$84,000 = \$20,000 + \text{Purchases} - \$18,000$$

$$\text{Purchases} = \$84,000 - \$20,000 + \$18,000 = \$82,000$$

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 = \$5,560 + \$32,000 + \$4,790 = \$42,350

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	\$ 6.80
Direct labor	4.00
Variable manufacturing overhead	1.55
Variable manufacturing cost per unit	<u>\$ 12.35</u>
Total variable manufacturing cost (\$12.35 per unit × 3,900 units produced)	<u>\$ 48,165</u>
Total fixed manufacturing overhead cost (\$2.50 per unit × 3,900 units produced)	9,750
Total product (manufacturing) cost	<u><u>\$ 57,915</u></u>

A

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

D

Sales commissions	\$ 1.50
Variable administrative expense	0.45
Variable selling and administrative expense per unit	<u>\$ 1.95</u>
Total variable selling and administrative expense (\$1.95 per unit × 4,000 units sold)	<u>\$ 7,800</u>
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	<u><u>\$ 12,200</u></u>

A

Direct materials	\$ 6.80
Direct labor	4.00
Direct manufacturing cost per unit (a)	<u>\$ 10.80</u>
Number of units produced (b)	2,900
Total direct manufacturing cost (a) × (b)	\$ 31,320

A

Direct materials	\$ 6.55
Direct labor	3.50
Direct manufacturing cost per unit (a)	<u>\$ 10.05</u>
Number of units produced (b)	3,000
Total direct manufacturing cost (a) × (b)	\$ 30,150

C

Total variable manufacturing overhead cost (\$1.50 per unit × 2,500 units)	\$ 3,750
Total fixed manufacturing overhead cost (\$4.00 per unit × 3,500 units*Footnote asterik)	14,000
Total indirect manufacturing cost	<u>\$ 17,750</u>

*Footnote asterikThe average fixed manufacturing overhead cost per unit was determined by dividing the total fixed manufacturing overhead cost by 3,500 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 asterik)	10,400
Total indirect manufacturing cost	<u>\$ 14,600</u>

*Footnote asterikThe 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	<u>\$ 11.10</u>
Total variable manufacturing cost (\$11.10 per unit × 4,000 units produced)	<u>\$ 44,400</u>
Total fixed manufacturing overhead cost	8,800
Total product (manufacturing) cost	<u><u>\$ 53,200</u></u>

B

Sales	\$
commissions	1
	.
	0
	0
Variable	0
administrati	.
ve expense	4
	0
Variable	\$
selling and	1
administrati	.
ve expense	4
per unit	0
Total	\$ 5,600
varia	
ble	
selli	
ng	
and	
admin	
istra	
tive	
expen	
se	
(\$1.4	
0 per	
unit	
x	
4,000	
units	
sold)	
Total	4,000
fixed	
sellin	
g and	
admini	
strati	
ve	
expens	
e	

Total	<u>\$ 9,600</u>
period	
(nonma	
nufact	
uring)	
cost	<u></u>

C

Direct materials	\$ 6.00
Direct labor	3.35
Direct manufacturing cost per unit (a)	<u>\$ 9.35</u>
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	<u>\$ 14,050</u>

A

Direct materials	\$ 7.05
Direct labor	3.50
Variable manufacturing overhead	1.65
Variable manufacturing cost per unit	<u>\$ 12.20</u>
Total variable manufacturing cost (\$12.20 per unit × 5,000 units produced)	<u>\$ 61,000</u>
Total fixed manufacturing overhead cost	11,000
Total product (manufacturing) cost	<u>\$ 72,000</u>

A

Sales commissions	\$ 1.00
Variable administrative expense	0.40
Variable selling and administrative expense per unit	<u>\$ 1.40</u>
Total variable selling and administrative expense (\$1.40 per unit × 5,000 units sold)	<u>\$ 7,000</u>
Total fixed selling and administrative expense	5,500
Total period (nonmanufacturing) cost	<u><u>\$ 12,500</u></u>

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	<u><u>\$ 13.60</u></u>

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	<u>\$ 13.60</u>
Variable cost per unit sold (a)	<u>\$ 13.60</u>
Number of units sold (b)	4,000
Total variable costs (a) × (b)	\$ 54,400

B

Total variable manufacturing overhead cost (\$1.55 per unit × 6,000 units)	\$ 9,300
Total fixed manufacturing overhead cost	16,500
Total manufacturing overhead cost	<u><u>\$ 25,800</u></u>

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	<u>\$ 17,600</u>

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	<u>13.60</u>
Contribution margin per unit	<u>\$ 5.10</u>

D

Direct materials	\$ 7.05
Direct labor	3.50
Direct manufacturing cost per unit (a)	<u>\$ 10.55</u>
Number of units produced (b)	6,000
Total direct manufacturing cost (a) × (b)	<u>\$ 63,300</u>

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	<u>\$ 20,900</u>

D

Direct materials	\$ 7.05
Direct labor	3.50
Variable manufacturing overhead	1.65
Incremental manufacturing cost	<u>\$ 12.20</u>

B

Direct materials	\$ 4.90
Direct labor	2.95
Direct manufacturing cost per unit (a)	<u>\$ 7.85</u>
Number of units produced (b)	3,000
Total direct manufacturing cost (a) × (b)	<u>\$ 23,550</u>

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	<u>\$ 11,750</u>

A

Direct materials	\$ 6.30
Direct labor	3.65
Direct manufacturing cost per unit (a)	<u>\$ 9.95</u>
Number of units produced (b)	8,000
Total direct manufacturing cost (a) × (b)	<u>\$ 79,600</u>

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 asterik)	89,100
Total indirect manufacturing cost	<u>\$ 103,100</u>

*Footnote asterikThe 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	<u>\$ 19,400</u>

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	<u>12.55</u>
Contribution margin per unit	<u>\$ 9.35</u>

A

Direct materials	\$ 6.20
Direct labor	3.10
Direct manufacturing cost per unit (a)	<u>\$ 9.30</u>
Number of units produced (b)	6,000
Total direct manufacturing cost (a) × (b)	<u><u>\$ 55,800</u></u>

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	<u><u>\$ 20,900</u></u>

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	<u><u>\$ 22,100</u></u>

A

Direct materials	\$ 6.80
Direct labor	3.50
Variable manufacturing overhead	1.75
Incremental manufacturing cost	<u><u>\$ 12.05</u></u>

A

Direct materials	\$ 6.20
Direct labor	3.10
Variable manufacturing overhead	1.35
Incremental manufacturing cost	<u><u>\$ 10.65</u></u>

C

Direct costs include the cost of clay used in production and the wages paid to the workers who paint the figurines. $\$65,000 + \$81,000 = \$146,000$

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. $\$77,000 + \$87,000 = \$164,000$

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	\$ 121,500
× 9,000 units*Footnote asterik) (a)	
Number of units produced (b)	10,000
Average fixed manufacturing cost per unit produced (a) ÷	\$ 12.15
(b)	

*Footnote asterikThe 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 asterik	9,000
Total fixed manufacturing overhead cost	\$ 121,500

*Footnote asterikThe 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 asterik)	121,500
Total manufacturing overhead cost	<u>\$ 134,500</u>

*Footnote asterikThe 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	<u>\$ 12.05</u>

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	<u>\$ 12.05</u>
Variable cost per unit sold (a)	<u>\$ 12.05</u>
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 asterik) (a)	\$ 12,000
Number of units produced (b)	5,000
Average fixed manufacturing cost per unit produced (a) ÷ (b)	\$ 2.40

*Footnote asterikThe 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*	4,000
Total fixed manufacturing overhead cost	\$ 12,000

*The 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*)	12,000
Total manufacturing overhead cost	\$ 20,500

*The 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	\$ 6.65
Direct labor	3.70
Variable manufacturing overhead	1.45
Sales commissions	0.65
Variable administrative expense	0.70
Variable cost per unit sold	<u>\$ 13.15</u>
Variable cost per unit sold (a)	<u>\$ 13.15</u>
Number of units sold (b)	7,000
Total variable costs (a) × (b)	\$ 92,050

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	<u>\$ 12.65</u>
Variable cost per unit sold (a)	<u>\$ 12.65</u>
Number of units sold (b)	4,000
Total variable costs (a) × (b)	\$ 50,600

A

Total variable manufacturing overhead cost (\$1.60 per unit × 3,000 units)	\$ 4,800
Total fixed manufacturing overhead cost	12,000
Total manufacturing overhead cost	<u>\$ 16,800</u>

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	<u>\$ 21,000</u>

C

Selling price per unit		\$ 20.60
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
Contribution margin per unit		

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		

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	<u>\$ 12.85</u>

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	<u>\$ 12.85</u>
Variable cost per unit sold (a)	<u>\$ 12.85</u>
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	<u>\$ 10.85</u>
Total variable manufacturing cost (\$10.85 per unit × 4,000 units produced)	<u>\$ 43,400</u>
Total fixed manufacturing overhead cost (\$3.00 per unit × 4,000 units produced)	12,000
Total product (manufacturing) cost	<u><u>\$ 55,400</u></u>

B

Sales commissions	\$ 1.50
Variable administrative expense	0.50
Variable selling and administrative expense per unit	<u>\$ 2.00</u>
Total variable selling and administrative expense (\$2.00 per unit × 4,000 units sold)	<u>\$ 8,000</u>
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	<u><u>\$ 11,600</u></u>

A

Direct materials	\$ 4.85
Direct labor	3.35
Variable manufacturing overhead	1.35
Variable manufacturing cost per unit	<u>\$ 9.55</u>
Total variable manufacturing cost (\$9.55 per unit × 4,000 units produced)	<u>\$ 38,200</u>
Total fixed manufacturing overhead cost	8,000
Total product (manufacturing) cost	<u><u>\$ 46,200</u></u>

A

Sales commissions	\$ 1.60
Variable administrative expense	0.50
Variable selling and administrative expense per unit	<u>\$ 2.10</u>
Total variable selling and administrative expense (\$2.10 per unit × 6,500 units sold)	<u>\$ 13,650</u>
Total fixed selling and administrative expense	3,000
Total period (nonmanufacturing) cost	<u><u>\$ 16,650</u></u>

A

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

B

Direct materials	\$ 5.45
Direct labor	4.30
Variable manufacturing overhead	1.60
Sales commissions	2.20
Variable administrative expense	0.55
Variable cost per unit sold	<u><u>\$ 14.10</u></u>

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	<u><u>\$ 11.50</u></u>

C

Direct materials	\$ 5.20
Direct labor	3.80
Variable manufacturing overhead	1.35
Sales commissions	1.70
Variable administrative expense	0.30
Variable cost per unit sold	<u>\$ 12.35</u>
Variable cost per unit sold (a)	<u>\$ 12.35</u>
Number of units sold (b)	4,000
Total variable costs (a) × (b)	\$ 49,400

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	<u>\$ 11.50</u>
Variable cost per unit sold (a)	<u>\$ 11.50</u>
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	<u>\$ 11.95</u>
Total variable manufacturing cost (\$11.95 per unit × 9,000 units produced)	<u>\$ 107,550</u>
Total fixed manufacturing overhead cost	81,000
Total product (manufacturing) cost	<u>\$ 188,550</u>

C

Sales commissions	\$ 0.50
Variable administrative expense	0.50
Variable selling and administrative expense per unit	<u>\$ 1.00</u>
Total variable selling and administrative expense (\$1.00 per unit × 9,000 units sold)	<u>\$ 9,000</u>
Total fixed selling and administrative expense	44,550
Total period (nonmanufacturing) cost	<u><u>\$ 53,550</u></u>

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 = $\$528,200 \div 38,000 = \13.90
Total sales commission = Sales commission per unit × Unit sales = $\$13.90 \times 34,500 =$
 $\$479,550$

C

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

A

Sales commission per unit = Total sales commissions ÷ Unit sales = $\$528,200 \div 38,000 = \13.90
The average sales commission per unit is constant within the relevant range.

A

Sales commission per unit = Total sales commissions ÷ Unit sales = $\$132,000 \div 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	<u>\$ 12.10</u>

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	<u>\$ 12.10</u>
Variable cost per unit sold (a)	<u>\$ 12.10</u>
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
= \$197,309 ÷ 7,100 machine-hours
= \$27.79 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		\$ 23.00
Direct materials	\$ 4.60	
Direct labor	4.20	
Variable manufacturing overhead	1.40	
Sales commissions	0.70	
Variable administrative expense	0.65	
Variable cost per unit sold		11.55
Contribution margin per unit		\$ 11.45

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		<u>\$ 140,000</u>	

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		<u>\$ 140,000</u>	
Fixed expenses:			
Fixed selling	40,000		
Fixed administrative	70,000	110,000	
Net operating income		<u>\$ 30,000</u>	

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
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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		<u>\$ 175,000</u>

C

Unit sales = \$910,000 ÷ \$65 per book = 14,000 books

Sales	\$	910,000
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Variable expenses:

Cost of goods sold	\$ 560,000	
Variable selling (\$4 per book × 14,000 books)	56,000	
Variable administrative (3% of \$910,000)	27,300	643,300
Contribution margin		<u>\$ 266,700</u>

C

Unit sales = \$900,000 ÷ \$50 per book = 18,000 books

Sales		\$ 900,000
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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		<u>\$ 144,000</u>

D

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 + (5% of \$990,000)

\$122,000 = Fixed administrative expenses + \$49,500

Fixed administrative expenses = \$122,000 – \$49,500 = \$72,500

Sales		\$ 990,000
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Variable expenses:

Cost of goods sold	\$ 675,000	
Variable selling (\$6 per book × 16,500 books)	99,000	
Variable administrative (5% of \$990,000)	49,500	823,500
Contribution margin		<u>\$ 166,500</u>

Fixed expenses:

Fixed selling	10,000	
Fixed administrative	72,500	82,500
Net operating income		<u>\$ 84,000</u>

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
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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			<u>\$ 144,000</u>

Fixed expenses:

Fixed selling		10,000	
Fixed administrative		68,000	78,000
Net operating income			<u><u>\$ 66,000</u></u>

C

Unit sales = \$910,000 ÷ \$70 per book = 13,000 books

Selling expenses = Fixed selling expenses + (\$5 per book × 13,000 books)

\$113,000 = Fixed selling expenses + \$65,000

Fixed selling expenses = \$113,000 – \$65,000 = \$48,000

Administrative expenses = Fixed administrative expenses + (0.03 × \$910,000)

\$130,000 = Fixed administrative expenses + \$27,300

Fixed administrative expenses = \$130,000 – \$27,300 = \$102,700

Variable administrative expense per unit = 0.03 × \$70 per book = \$2.10 per book

Y = (\$48,000 + \$102,700) + (\$5 + \$2.10) X

Y = \$150,700 + \$7.10X

C

Unit sales = $\$900,000 \div \$50 \text{ per book} = 18,000 \text{ books}$

Selling expenses = Fixed selling expenses + ($\$5 \text{ per book} \times 18,000 \text{ books}$)

$\$100,000 = \text{Fixed selling expenses} + \$90,000$

Fixed selling expenses = $\$100,000 - \$90,000 = \$10,000$

Administrative expenses = Fixed administrative expenses + ($0.04 \times \$900,000$)

$\$104,000 = \text{Fixed administrative expenses} + \$36,000$

Fixed administrative expenses = $\$104,000 - \$36,000 = \$68,000$

Variable administrative expense per unit = $0.04 \times \$50 \text{ per book} = \2 per book

$Y = (\$10,000 + \$68,000) + (\$5 + \$2) X$

$Y = \$78,000 + \$7X$

B

Unit sales = $\$900,000 \div \$50 \text{ per book} = 18,000 \text{ books}$

Unit cost of goods sold = $\$630,000 \div 18,000 \text{ 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		<u>\$ 160,000</u>

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 = $\$484,000$

A

Sunk cost = Cost of old machine = \$348,000

A

Differential cost = \$538,000 – \$476,000 = \$62,000

A

Differential cost = \$360,000 – \$340,000 = \$20,000

D

Opportunity cost = Return from alternative investment = \$432,000

D

Opportunity cost = Return from alternative investment = \$411,000

B

Sales	\$ 433,000
Cost of goods sold	176,100
Gross margin	\$ 256,900

B

Sales	\$ 4,096,400
Cost of goods sold	2,194,500
Gross margin	\$ 1,901,900

A

Sales			\$ 467,000
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Variable expenses:

Cost of goods sold	\$ 173,200		
Variable selling expense	19,500		
Variable administrative expense	10,100	202,800	
Contribution margin			\$ 264,200

A

Sales			\$ 4,096,400
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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		
		0	
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

D

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

A

Sales		\$ 1,555,500
Cost of goods sold		1,025,100
Gross margin		\$ 530,400

Essay

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

Essay

- a. 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

- b. 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

- a. 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

- b. 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

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

Essay

Variable cost = $\$125,188 \div 6,800 \text{ 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)	<u>\$ 294,863</u>
Cost per unit:	
Variable cost (d)	\$ 18.41
Fixed cost (e) [\$164,152 ÷ 7,100 units]	23.12
Total (f)	<u>\$ 41.53</u>

Essay

Variable cost = $\$174,504 \div 2,400 \text{ 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)	<u>\$ 251,397</u>
Cost per unit:	
Variable cost (d)	\$ 72.71
Fixed cost (e) [\$55,080 ÷ 2,700 units]	20.40
Total (f)	<u>\$ 93.11</u>

Essay

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