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

1. Java Joe operates a chain of coffee shops. The company pays rent of $20,000 per year for each shop. Supplies (napkins, bags, and condiments) are purchased as needed. The manager of each shop is paid a salary of $3,000 per month, and all other employees are paid on an hourly basis. Relative to the number of customers for a shop, the cost of supplies is which kind of cost?

Fixed cost

Variable cost

Mixed cost

Relevant cost

1. Select the correct statement regarding fixed costs.

Because they do not change, fixed costs should be ignored in decision making.

The fixed cost per unit decreases when volume increases.

The fixed cost per unit increases when volume increases.

The fixed cost per unit does not change when volume decreases.

1. Larry's Lawn Care incurs significant gasoline costs. This cost would be classified as a variable cost if the total gasoline cost:

varies inversely with the number of hours the lawn equipment is operated.

is not affected by the number of hours the lawn equipment is operated.

increases in direct proportion to the number of hours the lawn equipment is operated.

None of these are correct.

1. Select the correct statement regarding fixed costs.

There is a contradiction between the term "fixed cost per unit" and the behavior pattern implied by the term.

Fixed cost per unit is not fixed.

Total fixed cost remains constant when volume changes.

All of these are correct statements.

1. Rock Creek Bottling Company pays its production manager a salary of $6,000 per month. Salespersons are paid strictly on commission, at $1.50 for each case of product sold.  
     
   For Rock Creek Bottling Company, the production manager's salary is an example of:

a variable cost.

a mixed cost.

a fixed cost.

None of these

1. Rock Creek Bottling Company pays its production manager a salary of $6,000 per month. Salespersons are paid strictly on commission, at $1.50 for each case of product sold.  
     
    For Rock Creek Bottling Company, the cost of the salespersons' commissions is an example of:

a fixed cost.

a variable cost.

a mixed cost.

none of these

1. Based on the following cost data, what conclusions can you make about the costs of Product A and Product B?

|  |  |  |
| --- | --- | --- |
| Production: | **Total Cost** | |
| **Product A** | **Product B** |
| **10 units** | $ 100 | ? |
| **100 units** | $ 1,000 | ? |
| **1,000 units** | $ 10,000 | ? |
| Production: | **Unit Cost** | |
| **Product A** | **Product B** |
| **10 units** | ? | $ 10,000 |
| **100 units** | ? | $ 1,000 |
| **1,000 units** | ? | $ 100 |

The cost of Product A is a fixed cost and the cost of Product B is a variable cost.

The cost of Product A is a variable cost and the cost of Product B is a fixed cost.

The costs of Product A and Product B are both variable costs.

The costs of Product A and Product B are both mixed costs.

1. Based on the behavior shown in the following table, which of the following is a variable cost?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Units Produced** | **2** | **3** | **4** | **5** |
| **Cost Per Unit of Materials** | 500 | 500 | 500 | 500 |
| **Cost Per Unit of Labor** | 500 | 333 | 250 | 200 |
| **Total Utilities Cost** | 4,500 | 4,500 | 4,500 | 4,500 |

Materials Cost

Labor Cost

Utilities Cost

All of the costs are variable

1. At a production and sales level of 2,500 units, Bastion Company incurred $72,000 of fixed cost and $60,000 of variable cost. When 6,400 units of product are produced and sold the company's cost per unit is:  
   **Note: Round your final answer to whole dollars.**

$35.

$49.

$48.

$40.

1. At a production and sales level of 2,545 units, Bastion Company incurred $70,000 of fixed cost and $56,000 of variable cost. When 6,000 units of product are produced and sold the company's cost per unit is:

$46.

$39.

$34.

$44.

1. The following variable manufacturing costs apply to goods produced by Bitty Corporation.

|  |  |
| --- | --- |
| **Item** | **Cost per unit** |
| **Materials** | $ 3.10 |
| **Labor** | 2.60 |
| **Overhead** | 1.60 |
| **Total** | $ 7.30 |

Determine the total variable manufacturing cost if Bitty produces 4,100 units.

$6,560

$29,930

$12,710

$10,660

1. The following variable manufacturing costs apply to goods produced by Bitty Corporation.

|  |  |
| --- | --- |
| **Item** | **Cost per unit** |
| **Materials** | $ 4.00 |
| **Labor** | 3.50 |
| **Overhead** | 2.50 |
| **Total** | $ 10.00 |

Determine the total variable manufacturing cost if Bitty produces 3,000 units.

$12,000

$10,500

$7,500

$30,000

1. Wu Company incurred $38,100 of fixed cost and $30,100 of variable cost when 11,600 units of product were made and sold.  
   If the company's volume increases to 14,100 units, the company's total fixed costs will be:

$34,711

$38,100

$68,200

$72,811

1. Wu Company incurred $36,500 of fixed cost and $28,500 of variable cost when 10,000 units of product were made and sold.  
   If the company's volume increases to 12,500 units, the company's total fixed costs will be:

$35,625

$36,500

$65,000

$72,125

1. Ryan Company incurred $53,000 of fixed cost and $114,400 of variable cost when 22,000 units of product were made and sold.  
   If the company's volume decreases to 17,000 units, the company's total variable costs will be:

$52,038

$88,400

$114,400

$140,400

1. Ryan Company incurred $51,000 of fixed cost and $100,000 of variable cost when 20,000 units of product were made and sold.  
   If the company's volume decreases to 15,000 units, the company's total variable costs will be:

$50,000

$75,000

$100,000

$126,000

1. Two different costs incurred by Ruiz Company exhibit the following behavior pattern per unit:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Units Sold** | | | | | | | |
| **60** | | **120** | | **180** | | **240** | |
| **Cost Number 1** | $ 15 | per unit | $ 15 | per unit | $ 15 | per unit | $ 15 | per unit |
| **Cost Number 2** | $ 780 | per unit | $ 390 | per unit | $ 260 | per unit | $ 195 | per unit |

Cost Number 1 and Cost Number 2 exhibit which of the following cost behavior patterns, respectively?

Fixed and variable

Variable and fixed

Variable and variable

Fixed and fixed

1. Two different costs incurred by Ruiz Company exhibit the following behavior pattern per unit:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Units Sold** | | | | | | | |
| **50** | | **100** | | **150** | | **200** | |
| **Cost Number 1** | $ 14 | per unit | $ 14 | per unit | $ 14 | per unit | $ 14 | per unit |
| **Cost Number 2** | $ 600 | per unit | $ 300 | per unit | $ 200 | per unit | $ 150 | per unit |

Cost Number 1 and Cost Number 2 exhibit which of the following cost behavior patterns, respectively?

Variable and fixed

Fixed and variable

Variable and variable

Fixed and fixed

1. Based on the following cost data, items labeled (a) and (b) in the table below are which of the following amounts, respectively?

|  |  |  |
| --- | --- | --- |
| **Number of units:** | 1,900 | 3,800 |
| **Total cost:** |  |  |
| **Variable** | $ 9,500 | $ 19,000 |
| **Fixed** | $ 8,170 | $ 8,170 |
| **Cost per unit:** |  |  |
| **Variable** | $ 5.0 | (a) |
| **Fixed** | $ 4.3 | (b) |

(a) = $5.00; (b) = $2.15

(a) = $2.79; (b) = $3.00

(a) = $5.00; (b) = $4.30

(a) = $2.50; (b) = $2.1

1. Based on the following cost data, items labeled (a) and (b) in the table below are which of the following amounts, respectively?

|  |  |  |
| --- | --- | --- |
| **Number of units:** | 1,500 | 3,000 |
| **Total cost:** |  |  |
| **Variable** | $ 7,500 | $ 15,000 |
| **Fixed** | $ 6,000 | $ 6,000 |
| **Cost per unit:** |  |  |
| **Variable** | $ 5 | (a) |
| **Fixed** | $ 4 | (b) |

(a) = $3.00; (b) = $3.00

(a) = $5.00; (b) = $4.00

(a) = $2.50; (b) = $2.00

(a) = $5.00; (b) = $2.00

1. Two different costs incurred by Ruiz Company exhibit the following behavior pattern per unit:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Units Sold** | | | | | | | |
| **50** | | **100** | | **150** | | **200** | |
| **Cost Number 1** | $ 300 | per unit | $ 150 | per unit | $ 100 | per unit | $ 75 | per unit |
| **Cost Number 2** | $ 2 | per unit | $ 2 | per unit | $ 2 | per unit | $ 2 | per unit |

Cost Number 1 and Cost Number 2 exhibit which of the following cost behavior patterns, respectively?

Fixed and variable

Variable and variable

Fixed and fixed

Variable and fixed

1. Wu Company incurred $97,200 of fixed cost and $111,600 of variable cost when 3,100 units of product were made and sold.  
   If the company's volume doubles, the total cost per unit will:

increase but will not double.

stay the same.

double as well.

decrease.

1. Wu Company incurred $40,000 of fixed cost and $50,000 of variable cost when 4,000 units of product were made and sold.  
   If the company's volume doubles, the total cost per unit will:

stay the same.

decrease.

double as well.

increase but will not double.

1. Wu Company incurred $138,600 of fixed cost and $155,400 of variable cost when 3,700 units of product were made and sold.  
   If the company's volume increases to 4,200 units, the total cost per unit will be:

$37.

$33.

$70.

$75.

1. Wu Company incurred $40,000 of fixed cost and $50,000 of variable cost when 4,000 units of product were made and sold.  
   If the company's volume increases to 5,000 units, the total cost per unit will be:

$18.00.

$20.00.

$20.50.

$22.50.

1. Wu Company incurred $33,000 of fixed cost and $39,600 of variable cost when 3,300 units of product were made and sold.  
   If the company's volume increases to 4,300 units, the company's total costs will be:  
   **Note: Round your intermediate calculations to 2 decimal places.**

$92,093

$76,000

$84,600

$76,744

1. Wu Company incurred $40,000 of fixed cost and $50,000 of variable cost when 4,000 units of product were made and sold.  
   If the company's volume increases to 5,000 units, the company's total costs will be:

$100,000

$90,000

$102,500

$80,000

1. Wu Company incurred $40,000 of fixed cost and $40,000 of variable cost when 4,000 units of product were made and sold.  
   If the company's volume doubles, the company's **total cost** will:

stay the same.

double as well.

increase but will not double.

decrease.

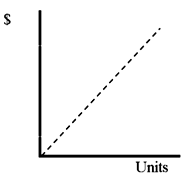
1. Wu Company incurred $40,000 of fixed cost and $50,000 of variable cost when 4,000 units of product were made and sold.  
     
   If the company's volume doubles, the company's **total cost** will:

stay the same.

double as well.

increase but will not double.

decrease.

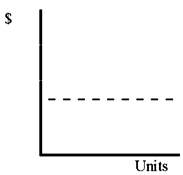
1. In the graph below, which depicts the relationship between units produced and total cost, the dotted line depicts which type of total **cost**?  
   

Variable cost

Fixed cost

Mixed cost

None of these

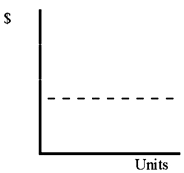
1. In the graph below, which depicts the relationship between units produced and unit cost, the dotted line depicts which type of **cost per unit**?  
   

Variable cost

Fixed cost

Mixed cost

None of these

1. In the graph below, which depicts the relationship between units produced and total cost, the dotted line depicts which type of **total cost**?  
   

Variable cost

Fixed cost

Mixed cost

None of these

1. Pickard Company pays its sales staff a base salary of $4,000 a month plus a $3.00 commission for each product sold. If a salesperson sells 600 units of product in January, the employee would be paid:

$2,200.

$4,000.

$5,800.

$1,800.

1. Pickard Company pays its sales staff a base salary of $4,500 a month plus a $3.00 commission for each product sold. If a salesperson sells 800 units of product in January, the employee would be paid:

$6,900.

$4,500.

$2,300.

$2,700.

1. Quick Change and Fast Change are competing oil change businesses. Both companies have 5,400 customers. The price of an oil change at both companies is $16. Quick Change pays its employees on a salary basis, and its salary expense is $48,600. Fast Change pays its employees $9 per customer served. Suppose Quick Change lures 800 customers from Fast Change by lowering its price to $14 per vehicle. Thus, Quick Change will have 6,200 customers and Fast Change will have only 4,600 customers.  
   Select the **correct** statement from the following.

Quick Change's profit will increase while Fast Change's profit will fall.

Fast Change's profit will fall but it will still earn a higher profit than Quick Change.

Quick Change's profit will remain the same while Fast Change's profit will decrease.

Profits will decline for both Quick Change and Fast Change.

1. Quick Change and Fast Change are competing oil change businesses. Both companies have 5,000 customers. The price of an oil change at both companies is $20. Quick Change pays its employees on a salary basis, and its salary expense is $40,000. Fast Change pays its employees $8 per customer served. Suppose Quick Change lures 1,000 customers from Fast Change by lowering its price to $18 per vehicle. Thus, Quick Change will have 6,000 customers and Fast Change will have only 4,000 customers.  
   Select the **correct** statement from the following.

Quick Change's profit will increase while Fast Change's profit will fall.

Fast Change's profit will fall but it will still earn a higher profit than Quick Change.

Profits will decline for both Quick Change and Fast Change.

Quick Change's profit will remain the same while Fast Change's profit will decrease.

1. Hard Nails and Bright Nails are competing nail salons. Both companies have the same number of customers. Both charge the same price for a manicure. The only difference is that Hard Nails pays its manicurists on a salary basis (i.e., a fixed cost structure) while Bright Nails pays its manicurists on the basis of the number of customers they serve (i.e., a variable cost structure). Both companies currently make the same amount of net income. If sales of both salons increase by an equal amount, Hard Nails:

will earn a higher profit than Bright Nails.

will earn a lower profit than Bright Nails.

will earn the same amount of profit as Bright Nails.

The answer cannot be determined from the information provided.

1. Fixed cost per unit:

decreases as production volume decreases.

is not affected by changes in the production volume.

decreases as production volume increases.

increases as production volume increases.

1. Cool Runnings operates a chain of frozen yogurt shops. The company pays $5,000 of rent expense per month for each shop. The managers of each shop are paid a salary of $3,000 per month and all other employees are paid on an hourly basis. Relative to the number of shops, the cost of rent is which kind of cost?

Variable cost

Fixed cost

Mixed cost

Opportunity cost

1. Companies A and B are in the same industry and are identical except for cost structure. At a volume of 50,000 units, the companies have equal net incomes. At 60,000 units, Company A's net income would be substantially higher than B's. Based on this information,

Company A's cost structure has more variable costs than B's.

Company A's cost structure has higher fixed costs than B's.

Company B's cost structure has higher fixed costs than A's.

At a volume of 50,000 units, Company A's magnitude of operating leverage was lower than B's.

1. Operating leverage exists when:

a company utilizes debt to finance its assets.

management buys enough of the company's shares of stock to take control of the corporation.

the organization makes purchases on credit instead of paying cash.

small percentage changes in revenue produce large percentage changes in profit.

1. For the last two years BRC Company had net income as follows:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Net Income** | $83,000 | $103,000 |

What was the percentage change in income from Year 1 to Year 2?

19.42% decrease

19.42% increase

24.10% decrease

24.10% increase

1. For the last two years BRC Company had net income as follows:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Net Income** | $160,000 | $200,000 |

What was the percentage change in income from Year 1 to Year 2?

20% increase

20% decrease

25% increase

25% decrease

1. Tutor, Incorporated (TI) provides instructional services to its customers. TI charges $370 per student. The company expects to serve 1,350 students during the coming year. All of the company's expenses are fixed. Total annual fixed costs are projected to be $145,000. If the estimated number of students increase by 20%, net income will increase by:  
   **Note: Round your final answer to the nearest percent.**

20%.

40%.

60%.

28%.

1. Tutor, Incorporated (TI) provides instructional services to its customers. TI charges $300 per student. The company expects to serve 1,000 students during the coming year. All of the company's expenses are fixed. Total annual fixed costs are projected to be $110,000. If the estimated number of students increase by 10%, net income will increase by:

10%.

16%.

20%.

30%.

1. Tutor, Incorporated (TI) provides instructional services to its customers. TI charges $360 per student. The company expects to serve 1,300 students during the coming year. All of the company's expenses are fixed. Total annual fixed costs are projected to be $140,000. If the estimated number of students decreases by 10%, net income will

increase by 14%.

decrease by 14%.

decrease by 10%.

increase by 10%.

1. Tutor, Incorporated (TI) provides instructional services to its customers. TI charges $300 per student. The company expects to serve 1,000 students during the coming year. All of the company's expenses are fixed. Total annual fixed costs are projected to be $110,000. If the estimated number of students decreases by 10%, net income will

increase by 10%.

increase by 16%.

decrease by 10%.

decrease by 16%.

1. Assume a company sold 48 units in Year 1 and 280 units in Year 2. What is the percentage change in units sold from Year 1 to Year 2?

5%

134%

34%

483%

1. Assume a company sold 30 units in Year 1 and 150 units in Year 2. What is the percentage change in units sold from Year 1 to Year 2?

4%

40%

140%

400%

1. Shifting the cost structure from fixed to variable

increases risk by decreasing operating leverage.

increases risk by increasing operating leverage.

reduces risk by decreasing operating leverage.

reduces risk by increasing operating leverage.

1. Assuming a firm has no operating leverage, a small change in revenue will result in

no change in profitability

a small change in profitability.

a large change in profitability.

The answer cannot be determined from this information.

1. Finley Company is currently operating profitably. The company has a fixed cost structure . Based on this information, which of the following statements is true?

If volume increases by 40%, profitability will increase by less than 40%.

If volume increases by 40%, profitability will increase by 40%.

If volume increases by 40%, profitability will decrease by 40%.

If volume increases by 40%, profitability will increase by more than 40%.

1. The activity director for City Recreation is planning an activity. She is considering alternative ways to set up the activity's cost structure. Select the **incorrect** statement from the following.

If the director expects a low turnout, she should use a fixed cost structure.

If the director expects a large turnout, she should attempt to convert variable costs into fixed costs.

If the director shifts the cost structure from fixed to variable, the level of risk decreases.

If the director shifts the cost structure from fixed to variable, the potential for profits will be reduced.

1. Select the**correct** statement regarding the relationship between cost behavior and profits.

A pure variable cost structure offers higher potential rewards.

A pure fixed cost structure offers more security if volume expectations are not achieved.

In a pure variable cost structure, when revenue increases by $1, so do profits.

In a pure fixed cost structure, the unit selling price and unit contribution margin are equal.

1. Select the**correct** statement from the following.

A fixed cost structure offers less risk (i.e., less earnings volatility) and higher opportunity for profitability than does a variable cost structure.

A variable cost structure offers less risk and higher opportunity for profitability than does a fixed cost structure.

A fixed cost structure offers greater risk but higher opportunity for profitability than does a variable cost structure.

A variable cost structure offers greater risk but higher opportunity for profitability than does a fixed cost structure.

1. The manager of Kenton Company stated that 45% of its total costs were fixed. The manager was describing the company's:

operating leverage.

contribution margin.

cost structure.

cost averaging.

1. Select the**incorrect** statement regarding cost structures.

Highly leveraged companies will experience greater profits than companies less leveraged when sales increase.

The more variable cost, the higher the fluctuation in income as sales fluctuate.

When sales change, the amount of the corresponding change in income is affected by the company's cost structure.

Faced with significant uncertainty about future revenues, a low leverage cost structure is preferable to a high leverage cost structure.

1. Executive management at Ballard Books is very optimistic about the chain's ability to achieve significant increases in sales in each of the next five years. The company will most benefit if management creates a:

low operating leverage cost structure.

medium operating leverage cost structure.

high operating leverage cost structure.

no operating leverage cost structure.

1. Based on the income statements shown below, which division has the cost structure with the highest operating leverage?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Soft Drinks** | **Bottled Water** | **Fruit Juices** |
| **Revenue** | $ 55,000 | $ 55,000 | $ 55,000 |
| **Variable costs** | (14,000) | (7,000) | (34,000) |
| **Contribution margin** | 41,000 | 48,000 | 21,000 |
| **Fixed costs** | (31,160) | (41,160) | (9,840) |
| **Net income** | $ 9,840 | $ 6,840 | $ 11,160 |

Bottled Water.

Fruit Juices.

Soft Drinks.

The three divisions have identical operating leverage.

1. Based on the income statements shown below, which division has the cost structure with the highest operating leverage?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Soft Drinks** | **Bottled Water** | **Fruit Juices** |
| **Revenue** | $ 50,000 | $ 50,000 | $ 50,000 |
| **Variable costs** | (10,000) | (5,000) | (30,000) |
| **Contribution margin** | 40,000 | 45,000 | 20,000 |
| **Fixed costs** | (30,000) | (40,000) | (10,000) |
| **Net income** | $ 10,000 | $ 5,000 | $ 10,000 |

Bottled Water.

Fruit Juices.

Soft Drinks.

The three divisions have identical operating leverage.

1. The following income statements are provided for two companies operating in the same industry:

|  |  |  |
| --- | --- | --- |
|  | **Felix Company** | **Jinx Company** |
| **Revenue** | $ 202,000 | $ 202,000 |
| **Variable costs** | (20,200) | (92,718) |
| **Contribution margin** | 181,800 | 109,282 |
| **Fixed costs** | (92,718) | (20,200) |
| **Net income** | $ 89,082 | $ 89,082 |

Assuming sales increase by $1,010, select the correct statement from the following:

Felix’s net income will be more than Jinx’s.

Only Felix will experience an increase in profit.

Felix's net income will increase by $250.

Jinx's net income will increase by 6%.

1. The following income statements are provided for two companies operating in the same industry:

|  |  |  |
| --- | --- | --- |
|  | **Felix Company** | **Jinx Company** |
| **Revenue** | $ 200,000 | $ 200,000 |
| **Variable costs** | (25,000) | (70,000) |
| **Contribution margin** | 175,000 | 130,000 |
| **Fixed costs** | (70,000) | (25,000) |
| **Net income** | $ 105,000 | $ 105,000 |

Assuming sales increase by $1,000, select the correct statement from the following:

Felix's net income will be more than Jinx's.

Only Felix will experience an increase in profit.

Felix's net income will increase by $250.

Jinx's net income will increase by 6%.

1. The excess of revenue over variable costs is referred to as:

gross profit

gross margin

contribution margin

manufacturing margin

1. Select the **incorrect** statement regarding the contribution margin income statement.

The contribution margin approach for the income statement is unacceptable for external reporting.

Contribution margin represents the amount available to cover product costs and thereafter to provide profit.

The contribution margin approach requires that all costs be classified as fixed or variable.

Assuming no change in fixed costs, a $1 increase in contribution margin will result in a $1 increase in profit.

1. Which of the following items would**not** be found on a contribution format income statement?

Fixed cost

Variable cost

Gross margin

Net income

1. The following income statement is provided for Ramirez Company for the current year:

|  |  |
| --- | --- |
| **Sales revenue (2,700 units × $20.20 per unit)** | $ 54,540 |
| **Cost of goods sold (variable; 2,700 units × $8.20 per unit)** | (22,140) |
| **Cost of goods sold (fixed)** | (4,200) |
| **Gross margin** | 28,200 |
| **Administrative salaries** | (6,200) |
| **Depreciation** | (4,200) |
| **Supplies (2,700 units × $2.20 per unit)** | (5,940) |
| **Net income** | $ 11,860 |

What amount was the company's contribution margin?

$11,860

$26,460

$32,400

$28,200

1. The following income statement is provided for Ramirez Company for the current year:

|  |  |
| --- | --- |
| **Sales revenue (2,500 units × $40 per unit)** | $100,000 |
| **Cost of goods sold (variable; 2,500 units × $16 per unit)** | (40,000) |
| **Cost of goods sold (fixed)** | (8,000) |
| **Gross margin** | 52,000 |
| **Administrative salaries** | (12,000) |
| **Depreciation** | (8,000) |
| **Supplies (2,500 units × $4 per unit)** | (10,000) |
| **Net income** | $ 22,000 |

What amount was the company's contribution margin?

$50,000

$22,000

$52,000

$60,000

1. The following information was drawn from the accounting records of Dark Night, Incorporated:

|  |  |
| --- | --- |
| Income Statement | |
| **Sales Revenue (220 @ $570 per unit)** | $ 125,400 |
| **Cost of Goods Sold: Variable (220 @ $270 per unit)** | (59,400) |
| **Gross Margin** | 66,000 |
| **Sales Commissions (220 @ $30)** | (6,600) |
| **Fixed Period Expenses** | (15,500) |
| **Net Income** | $ 43,900 |

Based on this information, Dark Night’s contribution margin is:

$109,900.

$56,400.

$59,400.

$43,900.

1. The following information was drawn from the accounting records of Dark Night, Incorporated:

|  |  |
| --- | --- |
| Income Statement | |
| **Sales Revenue (350 @ $700 per unit)** | $ 245,000 |
| **Cost of Goods Sold: Variable (350 @ $400 per unit)** | (140,000) |
| **Gross Margin** | 105,000 |
| **Sales Commissions (350 @ $40)** | (14,000) |
| **Fixed Period Expenses** | (14,000) |
| **Net Income** | $ 77,000 |

Based on this information, Dark Night’s contribution margin is:

$77,000.

$88,000.

$91,000.

$231,000.

1. Omega Company has sales of $326,000 and cost of goods sold of $213,000. The cost of goods sold is a variable cost. The Company incurred $33,000 of fixed operating expenses and $46,500 of variable operating expenses. Based on this information

net income is $113,000 under the gross margin format and $33,500 under the contribution margin format.

net income is $33,500 under the gross margin format and $113,000 under the contribution margin format.

the company's gross margin is $66,500, while its contribution margin is $113,000.

the company's gross margin is $113,000, while its contribution margin is $66,500.

1. Omega Company has sales of $320,000 and cost of goods sold of $210,000. The cost of goods sold is a variable cost. The Company incurred $30,000 of fixed operating expenses and $45,000 of variable operating expenses. Based on this information

the company's gross margin is $65,000, while its contribution margin is $110,000.

net income is $110,000 under the gross margin format and $35,000 under the contribution margin format.

net income is $35,000 under the gross margin format and $110,000 under the contribution margin format.

the company's gross margin is $110,000, while its contribution margin is $65,000.

1. Sam Company sells dog toys. Each toy is priced at $8. The variable cost per unit is $3, and the fixed cost per unit is $1. If Sam sells 180 dog toys, what is the total contribution margin?

$1,260

$180

$900

$540

1. Sam Company sells dog toys. Each toy is priced at $9. The variable cost per unit is $4, and the fixed cost per unit is $1. If Sam sells 100 dog toys, what is the total contribution margin?

$100

$500

$800

$400

1. The following information is provided for Sax Company:

|  |  |
| --- | --- |
| **Sales revenue** | $ 2,700,000 |
| **Fixed costs** | 520,000 |
| **Variable costs** | 320,000 |

What is this company's contribution margin?

$2,180,000

$1,860,000

$2,380,000

$3,020,000

1. The following information is provided for Sax Company:

|  |  |
| --- | --- |
| **Sales revenue** | $ 2,500,000 |
| **Fixed costs** | 500,000 |
| **Variable costs** | 300,000 |

What is this company's contribution margin?

$2,000,000

$1,700,000

$2,200,000

$2,800,000

1. In order to prepare a contribution format income statement, costs must be separated into:

manufacturing and selling, general, and administrative costs.

cost of goods sold and operating expenses.

variable and fixed costs.

mixed, variable and fixed costs.

1. Select from the following the**incorrect** statement regarding contribution margin.

Sales − Fixed costs = Contribution margin

Net income + Total fixed costs = Contribution margin

At the breakeven point (where the company has neither profit nor loss), Total fixed costs = Total contribution margin

Total sales revenue times the contribution margin percentage = Total contribution margin

1. The following information is provided for Southall Company:

|  |  |
| --- | --- |
| **Sales revenue** | $ 280,000 |
| **Variable manufacturing costs** | 95,000 |
| **Fixed manufacturing costs** | 65,000 |
| **Variable selling and administrative costs** | 40,000 |
| **Fixed selling and administrative costs** | 35,000 |

What is this company's contribution margin?

$45,000

$145,000

$120,000

$80,000

1. The following information is provided for Southall Company:

|  |  |
| --- | --- |
| **Sales revenue** | $ 125,000 |
| **Variable manufacturing costs** | 42,500 |
| **Fixed manufacturing costs** | 37,500 |
| **Variable selling and administrative costs** | 15,000 |
| **Fixed selling and administrative costs** | 12,500 |

What is this company's contribution margin?

$30,000

$17,500

$45,000

$67,500

1. Which of the following equations can be used to compute a firm's magnitude of operating leverage?

Net income ÷ sales

Fixed costs ÷ contribution margin

Contribution margin ÷ net income

Net income ÷ contribution margin

1. The following income statement is provided for Vargas, Incorporated

|  |  |
| --- | --- |
| **Sales revenue (3,000 units × $20.50 per unit)** | $ 61,500 |
| **Cost of goods sold (variable; 3,000 units × $10.50 per unit)** | (31,500) |
| **Cost of goods sold (fixed)** | (4,500) |
| **Gross margin** | 25,500 |
| **Administrative salaries** | (6,500) |
| **Depreciation** | (5,500) |
| **Supplies (3,000 units × $2.50 per unit)** | (7,500) |
| **Net income** | $ 6,000 |

What is this company's magnitude of operating leverage?  
**Note: Round your answer to 2 decimal places.**

0.24

0.23

4.25

3.75

1. The following income statement is provided for Vargas, Incorporated

|  |  |
| --- | --- |
| **Sales revenue (2,500 units × $60 per unit)** | $ 150,000 |
| **Cost of goods sold (variable; 2,500 units × $20 per unit)** | (50,000) |
| **Cost of goods sold (fixed)** | (8,000) |
| **Gross margin** | 92,000 |
| **Administrative salaries** | (42,000) |
| **Depreciation** | (10,000) |
| **Supplies (2,500 units × $4 per unit)** | (10,000) |
| **Net income** | $ 30,000 |

What is this company's magnitude of operating leverage?

3.07

0.33

3.00

1.67

1. The following income statement is provided for Grant, Incorporated

|  |  |
| --- | --- |
| **Sales revenue (2,400 @ $15.90 per unit)** | $ 38,160 |
| **Variable costs (2,400 @ $7.90 per unit)** | 18,960 |
| **Fixed costs** | 5,900 |
| **Net income** | $ 13,300 |

What is this company's magnitude of operating leverage?  
**Note: Round your answer to 2 decimal places.**

1.44

2.01

1.43

2.87

1. The following income statement is provided for Grant, Incorporated

|  |  |
| --- | --- |
| **Sales revenue (1,500 @ $30 per unit)** | $ 45,000 |
| **Variable costs (1,500 @ $14 per unit)** | 21,000 |
| **Fixed costs** | 16,000 |
| **Net income** | $ 8,000 |

What is this company's magnitude of operating leverage?

0.33

1.31

2.00

3.00

1. The following information was drawn from the records of Calico Company:

|  |  |
| --- | --- |
| **Sales Revenue (200 @ $550 per unit)** | $ 110,000 |
| **Cost of Goods Sold: Variable (200 @ $250 per unit)** | (50,000) |
| **Fixed** | (15,500) |
| **Gross Margin** | 44,500 |
| **Sales Commissions (200 @ $50 per unit)** | (10,000) |
| **Depreciation** | (2,500) |
| **Net Income** | $ 32,000 |

Based on this information the magnitude of operating leverage is approximately:  
**Note: Round your answer to 2 decimal places.**

1.50.

1.63.

1.56.

1.28.

1. The following information was drawn from the records of Calico Company:

|  |  |
| --- | --- |
| **Sales Revenue (350 @ $700 per unit)** | $ 245,000 |
| **Cost of Goods Sold: Variable (350 @ $400 per unit)** | (140,000) |
| **Fixed** | (13,000) |
| **Gross Margin** | 92,000 |
| **Sales Commissions (350 @ $40 per unit)** | (14,000) |
| **Depreciation** | (2,000) |
| **Net Income** | $ 76,000 |

Based on this information the magnitude of operating leverage is approximately:  
**Note: Round your answer to 2 decimal places.**

1.20.

0.92.

1.27.

1.14.

1. At a sales level of $286,000, the magnitude of operating leverage for Donuts Unlimited is 4.4. If number of units sold increase by 15%, profits will increase by:

66.00%

20.27%

4.40%

15.00%

1. At a sales level of $280,000, the magnitude of operating leverage for Donuts Unlimited is 3.8. If number of units sold increase by 15%, profits will increase by:

19.67%

3.80%

57.00%

15.00%

1. Omega Company has sales of $460,000 and cost of goods sold of $280,000. The cost of goods sold is a variable cost. The company incurred $36,000 of fixed operating expenses and $56,000 of variable operating expenses. Based on this information, a(n) 22.00% increase in revenue will produce a  
   **Note: Round your intermediate calculations to 2 decimal places and final answer to one decimal place.**

23.4% change in net income.

22.0% change in net income.

44.0% change in net income.

31.0% change in net income.

1. Omega Company has sales of $400,000 and cost of goods sold of $250,000. The cost of goods sold is a variable cost. The company incurred $30,000 of fixed operating expenses and $50,000 of variable operating expenses. Based on this information, a 17.50% increase in revenue will produce a

25.0% change in net income.

18.9% change in net income.

17.5% change in net income.

35.0% change in net income.

1. The magnitude of operating leverage for Forbes Corporation is 1.9 when sales are $110,000 and net income is $15,000. If sales increase by 5%, what is net income expected to be?

$14,750

$16,425

$15,750

$19,000

1. The magnitude of operating leverage for Forbes Corporation is 1.8 when sales are $200,000 and net income is $24,000. If sales increase by 5%, what is net income expected to be?

$25,200

$26,160

$24,667

$43,200

1. The magnitude of operating leverage for Blue Ridge Corporation is 2.5 when sales are $130,000 and net income is $29,000. If sales decrease by 6%, net income is expected to decrease by what amount?

$4,350

$1,740

$3,420

$740

1. The magnitude of operating leverage for Blue Ridge Corporation is 3.5 when sales are $200,000 and net income is $36,000. If sales decrease by 6%, net income is expected to decrease by what amount?

$2,160

$7,560

$3,420

$1,260

1. The magnitude of operating leverage for Perkins Corporation is 4.0 when sales are $104,000. If sales increase to $116,480, profits would be expected to increase by what percent?  
   **Note: Round your answer to 1 decimal place.**

4.0%

16.0%

48.0%

10.0%

1. The magnitude of operating leverage for Perkins Corporation is 4.5 when sales are $100,000. If sales increase to $110,000, profits would be expected to increase by what percent?

4.5%

14.5%

45.0%

10.0%

1. Based on the income statements of the three following retail businesses, which company has the highest operating leverage?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Alpha Company** | **Beta Company** | **Gamma Company** |
| **Revenue** | $ 245,000 | $ 245,000 | $ 245,000 |
| **Variable costs** | (131,000) | (191,000) | (161,000) |
| **Contribution margin** | $ 114,000 | $ 54,000 | $ 84,000 |
| **Fixed costs** | (80,000) | (20,000) | (50,000) |
| **Net income** | $ 34,000 | $ 34,000 | $ 34,000 |

Alpha Company

Beta Company

Gamma Company

They all have same operating leverage

1. Based on the income statements of the three following retail businesses, which company has the highest operating leverage?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Alpha Company** | **Beta Company** | **Gamma Company** |
| **Revenue** | $ 200,000 | $ 200,000 | $ 200,000 |
| **Variable costs** | (95,000) | (155,000) | (125,000) |
| **Contribution margin** | $ 105,000 | $ 45,000 | $ 75,000 |
| **Fixed costs** | (80,000) | (20,000) | (50,000) |
| **Net income** | $ 25,000 | $ 25,000 | $ 25,000 |

Alpha Company

Beta Company

Gamma Company

They all have same operating leverage

1. Wham Company sells electronic squirrel repellants for $45. Variable costs are 36% of sales and total fixed costs are $35,000. What is the firm's magnitude of operating leverage if 1,500 units are sold?

5.27

2.96

1.78

None of these

1. Wham Company sells electronic squirrel repellants for $60. Variable costs are 60% of sales and total fixed costs are $40,000. What is the firm's magnitude of operating leverage if 2,000 units are sold?

0.17

6.00

2.25

None of these

1. Whether a cost behaves as a fixed cost or as a variable cost depends upon the:

activity base used.

cost structure of the company.

industry.

significance of the dollar amount of the cost.

1. Craft, Incorporated normally produces between 120,000 and 150,000 units each year. Producing more than 150,000 units alters the company's cost structure. For example, fixed costs increase because more space must be rented, and additional supervisors must be hired. The production range between 120,000 and 150,000 is called the:

differential range.

median range.

relevant range.

leverage range.

1. Mug Shots operates a chain of coffee shops. The company pays rent of $15,000 per year for each shop. Supplies (napkins, bags, and condiments) are purchased as needed. The managers of each shop are paid a salary of $2,500 per month and all other employees are paid on an hourly basis. The cost of rent relative to the number of customers in a particular shop and relative to the number of customers in the entire chain of shops is which kind of cost, respectively?

Variable cost and fixed cost

Fixed cost and fixed cost

Fixed cost and variable cost

Variable cost and variable cost

1. Select the**incorrect** statement regarding the relevant range of volume.

Total fixed costs are expected to remain constant.

Total variable costs are expected to vary in direct proportion with changes in volume.

Variable cost per unit is expected to remain constant.

Total cost per unit is expected to remain constant.

1. What are the expected average quarterly costs of running a consulting practice if fixed costs are expected to be $5,500 a month and variable costs are expected to be $150 per client for each quarter? Expected number of clients for the year are  
   **Note: Do not round intermediate calculations:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Jan-March** | **April-June** | **July-Sep** | **Oct-Dec** |
| 135 | 165 | 185 | 125 |

$41,625

$39,375

$50,625

$22,875

1. What are the expected average quarterly costs of running a consulting practice if fixed costs are expected to be $4,000 a month and variable costs are expected to be $100 per client for each quarter? Expected number of clients for the year are:

|  |  |  |  |
| --- | --- | --- | --- |
| **Jan-March** | **April-June** | **July-Sep** | **Oct-Dec** |
| 110 | 140 | 150 | 100 |

$12,500

$24,500

$16,500

$19,500

1. Owens sells computers. He purchases the computers for $640 each and incurs $117,000 in fixed operating expenses each month. If Owens makes and sells 1,300 units of product, what is the average cost per unit?

$640

$90

$730

$460

1. Owens sells computers. He purchases the computers for $600 each and incurs $50,000 in fixed operating expenses each month. If Owens makes and sells 1,000 units of product, what is the average cost per unit?

$650

$600

$50

$500

1. Summit Incorporated operates a concert series that has monthly fixed expense of $7,000. In addition, the company pays distributors $4.00 per ticket sold. The following chart shows the number of tickets Summit expects to sell during the year.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **January** | **February** | **March** | **April** | **May** | **June** | **July** | **August** | **September** | **October** | **November** | **December** | **Total** |
| 1,200 | 1,000 | 1,100 | 600 | 1,100 | 1,000 | 1,700 | 1,100 | 900 | 1,000 | 500 | 800 | 12,000 |

Assume Summit wants to earn $5.00 per concert attendee. How much should the company charge for a ticket in January?

$16.00

$11.00

$12.00

None of the answers are correct.

1. Summit Incorporated operates a concert series that has monthly fixed expense of $6,000. In addition , the company pays distributors $2.00 per ticket sold. The following chart shows the number of tickets Summit expects to sell during the year.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **January** | **February** | **March** | **April** | **May** | **June** | **July** | **August** | **September** | **October** | **November** | **December** | **Total** |
| 1,000 | 800 | 900 | 400 | 900 | 1,200 | 1,500 | 900 | 700 | 800 | 300 | 600 | 10,000 |

Assume Summit wants to earn $5.00 per concert attendee. How much should the company charge for a ticket in January?

$14.20

$9.20

$12.20

None of the answers are correct.

1. Yankee Tours provide seven-day guided tours along the New England coast. The company pays its guides a total of $386,400 per year. The average cost of supplies, lodging, and food per customer is $420. The company expects a total of 2,300 customers during the period January through June, and a total of 6,900 customers from July through December. Yankee wants to earn $120 income per customer. For promotional reasons the company desires to charge the same price throughout the year. Based on this information, what is the correct price per customer?  
   **Note: Round your answer to the nearest dollar.**

$624

$582

$520

$462

1. Yankee Tours provide seven-day guided tours along the New England coast. The company pays its guides a total of $100,000 per year. The average cost of supplies, lodging, and food per customer is $500. The company expects a total of 500 customers during the period January through June, and a total of 1,500 customers from July through December. Yankee wants to earn $100 income per customer. For promotional reasons the company desires to charge the same price throughout the year. Based on this information, what is the correct price per customer?  
   **Note: Round your answer to the nearest dollar.**

$450

$500

$650

$700

1. Select the**incorrect** statement regarding the use of average unit costs.

Average costs should be calculated for a sufficiently long time period to capture seasonal fluctuations in costs.

Average costs are often more relevant for decision making than are actual costs.

Average cost information can help managers evaluate performance of the company or departments in the company.

Cost averaging should be used only for fixed costs, and not for variable costs.

1. The following information is given regarding driving lessons provided by Arrive Alive Company over several spans of time:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Length of Time** | | |
| **TODAY** | **ONE YEAR** | **FIVE YEARS** |
| **Total cost of lessons** | $ 600 | $ 110,000 | $ 508,000 |
| **Number of lessons** | 50 | 10,000 | 55,000 |

Select the **incorrect** statement from the following.

The average cost per lesson over the five-year period was $9.24.

Based on the most current information, the cost per lesson was $12.00.

The average cost based on the total five-year period is probably the most appropriate cost for pricing purposes.

The selection of the most appropriate time span for calculating the average cost often requires considerable judgment.

1. Owens sells computers. He purchases the computers for $600 each and incurs $13,000 in fixed operating expenses each month. The average cost per unit is

$730 if Owens makes and sells 100 units of product.

$860 if Owens makes and sells 50 units of product.

$1,120 if Owens makes and sells 25 units of product.

All of the answers are correct.

1. Owens sells computers. He purchases the computers for $500 each and incurs $8,000 in fixed operating expenses each month. The average cost per unit is

$580 if Owens makes and sells 100 units of product.

$660 if Owens makes and sells 50 units of product.

$820 if Owens makes and sells 25 units of product.

All of the answers are correct.

1. Professional Exam Prep (PEP) uses a cost-plus model to determine the price it charges students. Specifically, the company charges cost plus 25% of cost. Fixed costs, including facility rental and instructor compensation, amount to $7,800 per month. PEP incurs variable costs for books and supplies that amount to $68 per student. Monthly, enrollment tends to fluctuate. The following data represent the company's expectations for the first three months of the current year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Month** | **January** | **February** | **March** | **Total** |
| **Number of Students** | 20 | 30 | 50 | 100 |
| **Total Variable Cost** | $ 1,360 | $ 2,040 | $ 3,400 | $ 6,800 |
| **Total Fixed Cost** | $ 7,800 | $ 7,800 | $ 7,800 | $ 23,400 |

Based on this information, which of the following amounts represents the average price PEP should charge per student for the month of January?

$458.00

$302.00

$572.50

$377.50

1. Professional Exam Prep (PEP) uses a cost-plus model to determine the price it charges students. Specifically, the company charges cost plus 25% of cost. Fixed costs, including facility rental and instructor compensation, amount to $7,000 per month. PEP incurs variable costs for books and supplies that amount to $60 per student. Monthly, enrollment tends to fluctuate. The following data represent the company's expectations for the first three months of the current year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Month** | **January** | **February** | **March** | **Total** |
| **Number of Students** | 15 | 25 | 60 | 100 |
| **Total Variable Cost** | $ 900 | $ 1,500 | $ 3,600 | $ 6,000 |
| **Total Fixed Cost** | $ 7,000 | $ 7,000 | $ 7,000 | $ 21,000 |

Based on this information, which of the following amounts represents the average price PEP should charge per student for the month of January?

$658.33

$270.00

$526.67

$337.50

1. A cost that contains both fixed and variable elements is referred to as a:

mixed cost.

hybrid cost.

relevant cost.

nonvariable cost.

1. Which of the following costs typically include both fixed and variable components?

Direct materials

Direct labor

Factory overhead

None of these

1. Southern Food Service operates six restaurants in the Atlanta area. The company pays rent of $20,000 per year for each shop. The managers of each shop are paid a salary of $4,200 per month and all other employees are paid on an hourly basis. Relative to the number of hours worked, total compensation cost for a particular shop is which kind of cost?

Mixed cost

Fixed cost

Variable cost

None of these

1. Production during the current year for California Manufacturing, a producer of high security bank vaults, was at its highest point in the month of June when 36 units were produced at a total cost of $560,000. The lowest point in production was in January when only 11 units were produced at a cost of $337,000. The company is preparing a budget for the current year and needs to project expected fixed cost for the budget year. Using the high-low method, the projected amount of fixed cost per month is:

$203,000

$228,880

$238,880

$223,000

1. Production during the current year for California Manufacturing, a producer of high security bank vaults, was at its highest point in the month of June when 80 units were produced at a total cost of $800,000. The lowest point in production was in January when only 20 units were produced at a cost of $440,000. The company is preparing a budget for the current year and needs to project expected fixed cost for the budget year. Using the high-low method, the projected amount of fixed cost per month is:

$120,000

$320,000

$480,000

$360,000

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 4,200 | 3,800 |
| **Sales revenue** | $ 63,840 | $ 57,760 |
| **Cost of goods sold** | 43,640 | 39,540 |
| **Gross margin** | 20,200 | 18,220 |
| **General, selling, and administrative expenses** | 13,780 | 12,820 |
| **Net income** | $ 6,420 | $ 5,400 |

Assuming that cost behavior did not change over the two-year period, what is the amount of the company's variable cost of goods sold per unit?

$8.00 per unit

$10.25 per unit

$16.25 per unit

None of these

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 3,500 | 3,000 |
| **Sales revenue** | $ 101,500 | $ 87,000 |
| **Cost of goods sold** | 68,000 | 60,000 |
| **Gross margin** | 33,500 | 27,000 |
| **General, selling, and administrative expenses** | 13,000 | 12,000 |
| **Net income** | $ 20,500 | $ 15,000 |

Assuming that cost behavior did not change over the two-year period, what is the amount of the company's variable cost of goods sold per unit?

$12.00 per unit

$16.00 per unit

$22.00 per unit

None of these

1. Calculate variable cost using the high-low method:

|  |  |  |
| --- | --- | --- |
| **Month** | **Units Sold** | **Total Cost** |
| **January** | 830 | $ 340 |
| **February** | 840 | $ 590 |
| **March** | 760 | $ 300 |
| **April** | 740 | $ 270 |

$70.00

$0.31

$10.00

$3.20

1. Calculate variable cost using the high-low method:

|  |  |  |
| --- | --- | --- |
| **Month** | **Units Sold** | **Total Cost** |
| **January** | 700 | $ 220 |
| **February** | 720 | $ 350 |
| **March** | 650 | $ 180 |
| **April** | 620 | $ 150 |

$0.50

$2

$20

$50

1. Using the high-low method, we estimated fixed costs to be $205,000 and variable costs to be $16 a unit. If 10,500 units are produced, what is the total cost?

$205,000

$373,000

$1,444,762

$168,000

1. Using the high-low method, we estimated fixed costs to be $200,000 and variable costs to be $15 a unit. If 10,000 units are produced, what is the total cost?

$150,000

$200,000

$350,000

$2,000,000

1. Calculate fixed cost using the high-low method:

|  |  |  |
| --- | --- | --- |
| **Month** | **Units Sold** | **Total Cost** |
| **January** | 150 | $ 1,050 |
| **February** | 250 | $ 2,230 |
| **March** | 105 | $ 1,025 |
| **April** | 90 | $ 950 |

$190

$160

$200

$230

1. Calculate fixed cost using the high-low method:

|  |  |  |
| --- | --- | --- |
| **Month** | **Units Sold** | **Total Cost** |
| **January** | 100 | $ 1,000 |
| **February** | 200 | $ 2,100 |
| **March** | 80 | $ 975 |
| **April** | 75 | $ 900 |

$140

$180

$125

$192

1. The following information was drawn from a scattergraph. Total cost at 24,000 units is $144,000. The line on the scattergraph intersects the Y axis at $24,000. What is variable cost per unit?

$10

$5

$6

None of the answers are correct.

1. The following information was drawn from a scattergraph. Total cost at 20,000 units is $100,000. The line on the scattergraph intersects the Y axis at $20,000. What is variable cost per unit?

$8

$4

$5

None of the answers are correct.

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 4,000 | 3,200 |
| **Sales revenue** | $ 59,200 | $ 47,360 |
| **Cost of goods sold** | 29,000 | 25,000 |
| **Gross margin** | 30,200 | 22,360 |
| **General, selling, and administrative expenses** | 9,700 | 8,420 |
| **Net income** | $ 20,500 | $ 13,940 |

Assuming that cost behavior did not change over the two-year period, what is the annual amount of the company's fixed manufacturing overhead?

$9,000

$18,000

$20,000

None of these

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 3,500 | 3,000 |
| **Sales revenue** | $ 101,500 | $ 87,000 |
| **Cost of goods sold** | 68,000 | 60,000 |
| **Gross margin** | 33,500 | 27,000 |
| **General, selling, and administrative expenses** | 13,000 | 12,000 |
| **Net income** | $ 20,500 | $ 15,000 |

Assuming that cost behavior did not change over the two-year period, what is the annual amount of the company's fixed manufacturing overhead?

$12,000

$24,000

$26,000

None of these

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 4,400 | 4,000 |
| **Sales revenue** | $ 67,760 | $ 61,600 |
| **Cost of goods sold** | 39,960 | 36,260 |
| **Gross margin** | 27,800 | 25,340 |
| **General, selling, and administrative expenses** | 16,220 | 15,100 |
| **Net income** | $ 11,580 | $ 10,240 |

Assuming that cost behavior did not change over the two-year period, what is the company's annual fixed general, selling, and administrative cost?

$4,400

$3,900

$1,950

$1,450

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 3,500 | 3,000 |
| **Sales revenue** | $ 101,500 | $ 87,000 |
| **Cost of goods sold** | 68,000 | 60,000 |
| **Gross margin** | 33,500 | 27,000 |
| **General, selling, and administrative expenses** | 13,000 | 12,000 |
| **Net income** | $ 20,500 | $ 15,000 |

Assuming that cost behavior did not change over the two-year period, what is the company's annual fixed general, selling, and administrative cost?

$6,500

$6,000

$3,000

$2,500

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 4,600 | 4,200 |
| **Sales revenue** | $ 71,760 | $ 65,520 |
| **Cost of goods sold** | 39,760 | 36,460 |
| **Gross margin** | 32,000 | 29,060 |
| **General, selling, and administrative expenses** | 18,820 | 17,540 |
| **Net income** | $ 13,180 | $ 11,520 |

Assuming that cost behavior did not change over the two-year period, what is Li Company's contribution margin in Year 2?

$17,430

$16,430

$23,430

$63,430

1. The following income statements are provided for Li Company's last two years of operation:

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Number of units produced and sold** | 3,500 | 3,000 |
| **Sales revenue** | $ 101,500 | $ 87,000 |
| **Cost of goods sold** | 68,000 | 60,000 |
| **Gross margin** | 33,500 | 27,000 |
| **General, selling, and administrative expenses** | 13,000 | 12,000 |
| **Net income** | $ 20,500 | $ 15,000 |

Assuming that cost behavior did not change over the two-year period, what is Li Company's contribution margin in Year 2?

$33,000

$32,000

$39,000

$69,000

1. Handy Hiking produces backpacks. In the previous year, its highest and lowest production levels occurred in July and January, respectively. In July, it produced 5,500 backpacks at a total cost of $187,250. In January, it produced 4,000 backpacks at a total cost of $95,000. Using the high-low method, the average variable cost per of producing a backpack was:

$124.25

$123.38

$34.05

$61.50

1. Handy Hiking produces backpacks. In the previous year, its highest and lowest production levels occurred in July and January, respectively. In July, it produced 5,000 backpacks at a total cost of $162,250. In January, it produced 3,500 backpacks at a total cost of $92,500. Using the high-low method, the average variable cost per of producing a backpack was:

$94.25

$93.38

$32.45

$46.50

1. Handy Hiking produces backpacks. In the previous year, its highest and lowest production levels occurred in July and January, respectively. In July, it produced 5,100 backpacks at a total cost of $165,000. In January, it produced 2,331 backpacks at a total cost of $93,000. Using the high-low method, the total estimated fixed cost was

$165,000.

$132,611.

$32,389.

None of the answers is correct.

1. Handy Hiking produces backpacks. In the previous year, its highest and lowest production levels occurred in July and January, respectively. In July, it produced 5,000 backpacks at a total cost of $160,000. In January, it produced 2,300 backpacks at a total cost of $92,500. Using the high-low method, the total estimated fixed cost was

$160,000.

$125,000.

$35,000.

None of the answers is correct.

1. The results below represent what form of cost behavior?

|  |  |  |
| --- | --- | --- |
|  | **Year 1** | **Year 2** |
| **Units** | 4,500 | 4,800 |
| **Total Cost** | $ 11,250 | $ 12,000 |

Fixed Cost

Variable Cost

Mixed Cost

Opportunity Cost

1. Based on the following operating data, the operating leverage is  
   **Note: Round your answer to 2 decimal places**:

|  |  |
| --- | --- |
| **Sales** | $ 950,000 |
| **Variable costs** | 387,000 |
| **Contribution margin** | 563,000 |
| **Fixed costs** | 137,000 |
| **Income from operations** | $ 426,000 |

1.32

1.69

0.69

2.23

1. Based on the following operating data, the operating leverage is:

|  |  |
| --- | --- |
| **Sales** | $ 500,000 |
| **Variable costs** | 280,000 |
| **Contribution margin** | 220,000 |
| **Fixed costs** | 180,000 |
| **Income from operations** | $ 40,000 |

0.18

5.50

1.22

12.5

1. The following information is for Gable, Incorporated and Harlowe, Incorporated for the recent year.

|  |  |  |
| --- | --- | --- |
|  | **Gable, Incorporated** | **Harlowe, Incorporated** |
| **Sales** | $ 980,000 | $ 980,000 |
| **Variable costs** | 430,000 | 230,000 |
| **Contribution margin** | 550,000 | 750,000 |
| **Fixed costs** | 200,000 | 400,000 |
| **Income from operations** | $ 350,000 | $ 350,000 |

Based on the above data, which company has a higher operating leverage?

Gable, Incorporated

Harlowe, Incorporated

Operating leverage is the same for both companies

Cannot be determined

1. The following information is for Gable, Incorporated and Harlowe, Incorporated for the recent year.

|  |  |  |
| --- | --- | --- |
|  | **Gable, Incorporated** | **Harlowe, Incorporated** |
| **Sales** | $ 800,000 | $ 800,000 |
| **Variable costs** | 400,000 | 200,000 |
| **Contribution margin** | 400,000 | 600,000 |
| **Fixed costs** | 200,000 | 400,000 |
| **Income from operations** | $ 200,000 | $ 200,000 |

Based on the above data, which company has a higher operating leverage?

Gable, Incorporated

Harlowe, Incorporated

Operating leverage is the same for both companies

Cannot be determined

1. The following information is for Gable, Incorporated and Harlowe, Incorporated for the recent year.

|  |  |  |
| --- | --- | --- |
|  | **Gable, Incorporated** | **Harlowe, Incorporated** |
| **Sales** | $ 750,000 | $ 750,000 |
| **Variable costs** | 390,000 | 217,500 |
| **Contribution margin** | 360,000 | 532,500 |
| **Fixed costs** | 162,000 | 397,500 |
| **Income from operations** | $ 198,000 | $ 135,000 |

What total amount of net income will Harlowe, Incorporated earn if it experiences a 10 percent increase in revenue?

$210,042

$75,000

$188,250

$13,500

1. The following information is for Gable, Incorporated and Harlowe, Incorporated for the recent year.

|  |  |  |
| --- | --- | --- |
|  | **Gable, Incorporated** | **Harlowe, Incorporated** |
| **Sales** | $ 800,000 | $ 800,000 |
| **Variable costs** | 400,000 | 200,000 |
| **Contribution margin** | 400,000 | 600,000 |
| **Fixed costs** | 200,000 | 400,000 |
| **Income from operations** | $ 200,000 | 200,000 |

What total amount of net income will Harlowe, Incorporated earn if it experiences a 10 percent increase in revenue?

$180, 000

$80,000

$260,000

$20,000

|  |  |  |  |
| --- | --- | --- | --- |
| **Units sold** | 20 | 40 | 60 |
| **Total salary cost** | $ 6,000 | $ 7,800 | $ 9,200 |
| **Total cost of goods sold** | 14,000 | 28,000 | 42,000 |
| **Depreciation cost per unit** | $ 120 | $ 60 | $ 40 |

Based on the above information, select the correct statement.

Cost of goods sold is a mixed cost.

Salary cost is a mixed cost.

Depreciation cost is a variable cost.

If the company sells 20 units for $540 each, it will incur a loss of $200.

1. Select the**incorrect** statement regarding fixed and variable costs.

Fixed cost per unit remains constant as the number of units increases.

Total variable cost is represented by a straight line sloping upward from the origin when total variable cost is graphed versus number of units.

The concept of relevant range applies to both fixed costs and variable costs.

The terms "fixed" and "variable" refer to the behavior of total cost.

1. The following information is for Companies M and N for the most recent year:

|  |  |  |
| --- | --- | --- |
|  | **Company M** | **Company N** |
| **Sales** | $ 560,000 | $ 560,000 |
| **Variable costs** | $ 336,000 | $ 224,000 |
| **Fixed costs** | $ 56,000 | $ 168,000 |

Based on this information, which of the following statements is **incorrect**?

N’s magnitude of operating leverage is lower than M’s.

N would suffer more than M from an equal drop in sales revenue.

N's cost structure carries greater risk and greater potential for profit.

If N’s sales increased by 20%, its net income would increase by 40%.

1. The following information is for Companies M and N for the most recent year:

|  |  |  |
| --- | --- | --- |
|  | **Company M** | **Company N** |
| **Sales** | $ 500,000 | $ 500,000 |
| **Variable costs** | $ 300,000 | $ 200,000 |
| **Fixed costs** | $ 50,000 | $ 150,000 |

Based on this information, which of the following statements is **incorrect**?

N’s magnitude of operating leverage is lower than M’s.

N would suffer more than M from an equal drop in sales revenue.

N's cost structure carries greater risk and greater potential for profit.

If N's sales increased by 20%, its net income would increase by 40%.

1. Carson Corporation's sales increase from $410,000 to $471,500 in the current year. What is the percentage change in sales?

15%

13.0%

18%

16%

1. Carson Corporation's sales increase from $500,000 to $600,000 in the current year. What is the percentage change in sales?

20%

25%

22%

16.7%

1. Frazier Company sells women's ski jackets. The average sales price is $285 and the variable cost per jacket is $135. Fixed Costs are $1,260,000. If Frazier sells 16,000 jackets, the contribution margin will be:

$3,300,000

$1,140,000

$2,400,000

$1,020,000

1. Frazier Company sells women's ski jackets. The average sales price is $275 and the variable cost per jacket is $175. Fixed Costs are $1,350,000. If Frazier sells 15,000 jackets, the contribution margin will be:

$2,775,000

$1,500,000

$2,250,000

$150,000

1. Mark Company, Incorporated sells electronics. The company generated sales of $70,000. Contribution margin is $33,600 and net income is $8,400. Based on this information, the magnitude of operating leverage is:

2.08

8.33

4.00

4.33

1. Mark Company, Incorporated sells electronics. The company generated sales of $45,000. Contribution margin is $20,000 and net income is $4,000. Based on this information, the magnitude of operating leverage is:

2.25

11.25

5.00

6.25

1. Which characteristic is true of the high-low method, the scattergraph method, and regression analysis?

All methods will produce the same estimate of variable and fixed costs.

All methods use historic data to estimate variable and fixed costs.

All methods use only two data points in analyzing a mixed cost.

None of these are correct.

1. Taste of the Town, Incorporated operates a gourmet sandwich shop. The company orders bread, cold cuts, and produce several times a week. If the cost of these items remains constant per customer served, the cost is said to be:

Variable

Fixed

Opportunity

Mixed

1. The following income statement was produced when volume of sales was at 400 units.

|  |  |
| --- | --- |
| **Sales Revenue** | $ 1,900 |
| **Variable Cost** | 1,000 |
| **Contribution Margin** | $ 900 |
| **Fixed Cost** | 500 |
| **Net Income** | $ 400 |

If volume reaches 500 units, net income will be:

$600

$1,675

$625

None of these

1. The following income statement was produced when volume of sales was at 400 units.

|  |  |
| --- | --- |
| **Sales Revenue** | $ 2,000 |
| **Variable Cost** | 1,200 |
| **Contribution Margin** | $ 800 |
| **Fixed Cost** | 300 |
| **Net Income** | $ 500 |

If volume reaches 500 units, net income will be:

$625

$1,800

$700

None of these

1. All of the following would be considered a fixed cost for a bottled water company **except**:

rent on warehouse facility.

depreciation on its manufacturing equipment.

hourly wages for machine operators.

property taxes on its factory building.

1. Assume that the management of Dairy Deli wants to expand operations. To help evaluate the risks involved in opening an additional store, the company president wants to know the amount of fixed cost a new store will likely incur. Management uses the regression method to analyze the company’s mixed costs. In terms of interpreting the results:

a low R2 statistic suggests that the independent value (units sold) more strongly influences the dependent variable (total cost).

the R2 statistic represents the percentage of change in the independent variable (units sold) that is explained by a change in the independent variable (total cost).

the R2 statistic represents the percentage of change in the dependent variable (total cost) that is explained by a change in the independent variable (units sold).

the R2 statistic is not a good measure of reliability.

1. The variable cost per unit increases in direct proportion to the activity base.

* true
* false

1. If managers of a company do not understand the behavior of its costs, they are likely to make poor decisions about the company's operations.

* true
* false

1. For a mixed cost, total cost increases in direct proportion to volume.

* true
* false

1. The total variable cost increases in direct proportion to volume.

* true
* false

1. If a company had a mixed cost structure, every dollar of revenue after covering the fixed costs would be pure profit.

* true
* false

1. As activity increases, the fixed cost per unit increases while the variable cost per unit remains constant.

* true
* false

1. Risk refers to the possibility that sacrifices may exceed benefits.

* true
* false

1. Operating leverage enables a company to convert small changes in fixed costs into dramatic changes in profitability.

* true
* false

1. If a company shifts its cost structure by decreasing fixed costs and increasing variable costs, it will lower both the level of risk and its potential for profits.

* true
* false

1. If revenues are expected to decline, management should attempt to convert its variable costs into fixed costs.

* true
* false

1. Companies with low operating leverage will experience lower profits when sales increase than will companies with higher operating leverage.

* true
* false

1. A company with a completely fixed cost structure will have operating leverage of 1.

* true
* false

1. Contribution margin represents the amount available to cover fixed expenses and then provide company profits.

* true
* false

1. No contribution margin is provided by selling one unit of a product at a price of $35 if variable production costs are $20, variable general and administrative costs are $5, and fixed costs are $10 per unit.

* true
* false

1. The contribution margin format income statement is **not** widely used for external financial reporting, but is allowed by GAAP.

* true
* false

1. The contribution margin format income statement classifies costs according to their behavior patterns.

* true
* false

1. Contribution margin can only be determined if costs are separated into product and period costs.

* true
* false

1. If a profitable company has both fixed and variable costs, its operating leverage will always be greater than 1.

* true
* false

1. The higher the magnitude of a company's operating leverage, the more benefit the company will receive from a given percentage increase in revenue.

* true
* false

1. The higher the magnitude of a company's operating leverage, the smaller the decrease in profit for a given percentage decrease in revenue.

* true
* false

1. A low magnitude of operating leverage is best for most companies.

* true
* false

1. The BRC Company is considering the introduction of a new line of high end electronics. Because there is considerable uncertainty with regard to the demand for the products, the company would probably be served better by a variable cost structure.

* true
* false

1. Descriptions of cost behavior as fixed or variable pertain to a particular range of activity.

* true
* false

1. Variable costs will become fixed outside the relevant range.

* true
* false

1. Within the relevant range, the fixed cost per unit can be expected to decrease with increases in volume.

* true
* false

1. The activity base selected determines whether a cost behaves as a variable cost or fixed cost.

* true
* false

1. A cost that is considered variable for one activity base may be considered fixed for a different activity base.

* true
* false

1. One reason for computing the average cost for a product rather than the actual cost is that average cost is easier to compute.

* true
* false

1. One way that computing an average cost per unit facilitates management decision making is that managers are provided more timely and more relevant cost information.

* true
* false

1. Potential problems associated with cost averaging can be reduced by averaging the cost over a shorter span of time.

* true
* false

1. A cost that is part selling cost and part manufacturing cost is referred to as a mixed cost.

* true
* false

1. When selecting the high and low observations under the high-low method of analyzing mixed costs, the selection should be based on the dependent variable (cost).

* true
* false

1. When using least-squares regression to determine variable and fixed costs, the r-square refers to the degree to which the change in the dependent variable can be explained by a change in the independent variable.

* true
* false

1. An advantage of using the scattergraph method over the high-low method is that all points of data are used in determining the cost line.

* true
* false

1. Multiple regression analysis should be performed when a single independent variable influences multiple dependent variables.

* true
* false

1. In regression analysis, an r-square value of one indicates that there is a perfect fit between the independent and dependent variables.

* true
* false

1. A disadvantage of the high-low method is that the high point and low point may not be representative of the total data set available.

* true
* false

**Answer Key**Test name: Chapter 02 Test Bank - Algorithmic and Static

B

B

C

D

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