

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

- 1) When the selling price per unit decreases, the breakeven point: 1) _____
 A) remains the same. B) increases.
 C) decreases proportionately. D) decreases.
- 2) When the selling price per unit decreases, the contribution margin per unit: 2) _____
 A) increases. B) increases proportionately.
 C) decreases. D) remains the same.
- 3) The phone bill for an accounting firm consists of both fixed and variable costs. Refer to the 4-month data below and apply the high-low method to answer the question. (Round your intermediate calculations to two decimal places) 3) _____

	Minutes	Total Bill
January	460	\$3,000
February	200	\$2,675
March	160	\$2,625
April	300	\$2,800

- What is the fixed portion of the total cost?
 A) \$2,425 B) \$2,625 C) \$2,225 D) \$1,850
- 4) The high-low method is used to: 4) _____
 A) separate mixed costs into their variable and fixed components.
 B) identify the relevant and irrelevant costs of a business.
 C) determine the sales level at highest capacity.
 D) determine the highest price that can be charged for a product.
- 5) Which of the following is a period cost? 5) _____
 A) Direct materials cost B) Manufacturing overhead
 C) Administrative cost D) Direct labor cost
- 6) Which of the following is the right formula for calculating total mixed cost? 6) _____
 A) Total mixed cost = (Variable cost per unit × Number of units) - Total fixed cost
 B) Total mixed cost = (Variable cost per unit ÷ Number of units) - Total fixed cost
 C) Total mixed cost = (Variable cost per unit × Number of units) + Total fixed cost
 D) Total mixed cost = (Variable cost per unit ÷ Number of units) + Total fixed cost
- 7) When the total variable costs are deducted from total mixed costs, we obtain: 7) _____
 A) variable cost per unit. B) total fixed costs.
 C) mixed cost per unit. D) total high-low costs.

- 8) Colin was a professional classical guitar player until his motorcycle accident that left him disabled. After long months of therapy, he hired an experienced luthier (maker of stringed instruments) and started a small shop to make and sell Spanish guitars. The guitars sell for \$700 and the fixed monthly operating costs are as follows: 8) _____

Rent and utilities	\$800
Wages and benefits to luthier	2,500
Other expenses	480

Colin's accountant told him about contribution margin ratios and he understood clearly that for every dollar of sales, \$0.60 went to cover his fixed costs, and that anything past that point was pure profit.

Colin is planning to increase the selling price to \$750. What impact will the increase in selling price have on the contribution margin ratio?

- A) It will go down from 70% to approximately 67%.
 - B) It will go up from 60% to approximately 63%.
 - C) It will go up 70% to 75%.
 - D) It will stay the same.
- 9) Venus Inc. has fixed costs of \$300,000. Total costs, both fixed and variable, are \$450,000 when 30,000 units are produced. Calculate the total costs if the volume increases to 60,000 units. 9) _____
- A) \$450,000
 - B) \$1,200,000
 - C) \$750,000
 - D) \$600,000
- 10) Which of the following formulae is the right formula for calculating contribution margin ratio? 10) _____
- A) Contribution margin ratio = Contribution margin - Net sales revenue
 - B) Contribution margin ratio = Contribution margin ÷ Net sales revenue
 - C) Contribution margin ratio = Contribution margin × Net sales revenue
 - D) Contribution margin ratio = Contribution margin + Net sales revenue
- 11) Porterhouse Company incurs both fixed and variable production costs. Assuming the production is within the relevant range, if volume goes up by 20%, then the total fixed costs would: 11) _____
- A) increase by an amount less than 20%.
 - B) increase by 20%.
 - C) decrease by 20%.
 - D) remain the same.
- 12) The phone bill for an accounting firm consists of both fixed and variable costs. Refer to the 4-month data below and apply the high-low method to answer the question. 12) _____

	Minutes	Total Bill
January	460	\$3,000
February	200	\$2,675
March	160	\$2,625
April	300	\$2,800

What is the variable cost per minute?

- A) \$0.58
 - B) \$1.08
 - C) \$1.25
 - D) \$0.67
- 13) Anthony Company's highest point of total cost was \$75,000 in June. Their point of lowest cost was \$50,000 in December. The company makes a single product. Production volume in June and December were 13,000 and 8,000 units, respectively. What is the fixed cost per month? 13) _____
- A) \$50,000
 - B) \$10,000
 - C) \$8,000
 - D) \$20,000

- 14) Colin was a professional classical guitar player until his motorcycle accident that left him disabled. 14) _____
After long months of therapy, he hired an experienced luthier (maker of stringed instruments) and started a small shop to make and sell Spanish guitars. The guitars sell for \$700 and the fixed monthly operating costs are as follows:

Rent and utilities	\$800
Wages and benefits to luthier	2,500
Other expenses	480

Colin's accountant told him about contribution margin ratios and he understood clearly that for every dollar of sales, \$0.60 went to cover his fixed costs, and that anything past that point was pure profit.

How many guitars does Colin have to sell each month to break even?

- A) 6 guitars B) 7 guitars C) 9 guitars D) 14 guitars

Drake Company's income statement for the most recent year appears below:

Sales (52,000 units)	\$1,300,000
Less: Variable expenses.....	<u>884,000</u>
Contribution margin.....	416,000
Less: Fixed expenses.....	<u>468,000</u>
Net operating loss	<u>\$ (52,000)</u>

1. The unit contribution margin is: _____
2. The break-even point in sales dollars is: _____
3. The break-even point in units is: _____
4. If the company desires a net operating income of \$100,000, the number of units needed to be sold is:

5. The sales manager is convinced that a \$120,000 expenditure on advertising will increase unit sales by 50% without any other increase in fixed expenses. If the sales manager is correct, the company's net operating income would increase by:

Show Detailed Calculations:

Browning Company sells two products-X and Y. Product X sells for \$25 per unit with variable costs of \$15. Product Y sells for \$30 with variable costs of \$20. Total fixed costs for the company are \$20,000. Browning Company typically sells three units of Product X for every unit of Product Y.

- 1- Compute breakeven point in total units
- 2- Compute breakeven point in units for product X and product Y?
- 3- Compute breakeven point in Sales Dollars for product X and Y required to earn target profit of \$10,000?
- 4- Prepare Browning Company contribution margin income statement using data in requirement 3.