

Chapter 15—Cost-Volume-Profit Analysis and Planning

Practice Quiz

1. With fixed costs of \$10,000/month and variable costs of \$2/unit, Blake reported a monthly profit of \$4,000 at a volume of 8,000 units. The unit selling price was:
- a. \$2.00
  - b. \$1.75
  - c. \$3.75
  - d. \$5.75

2. Presented is information from Wanda's contribution income statement:

Sales		\$85,000
Less variable costs:		
Manufacturing	\$30,000	
Selling and administrative	<u>10,000</u>	
(40,000)		
Contribution margin		45,000
Less fixed costs:		
Manufacturing	12,000	
Selling and administrative	<u>9,000</u>	<u>(21,000)</u>
Profit		<u><u>\$24,000</u></u>

With a functional income statement Wanda would have reported a gross margin of:

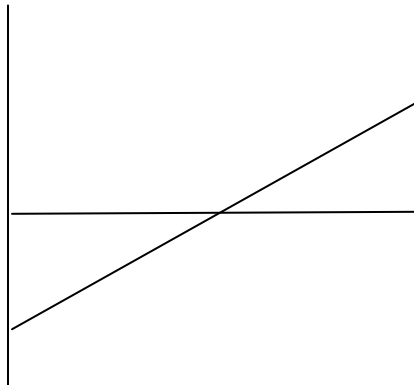
- a. \$24,000
  - b. \$43,000
  - c. \$66,000
  - d. \$45,000
3. Based on the information in Question 2, if Wanda had a \$10,000 increase in sales, profits would increase by:
- a. \$5,789
  - b. \$4,118
  - c. \$5,290
  - d. \$10,000

4. Regal Inc. produces a product sold for \$52 per unit. Variable and fixed cost information is presented below:

Variable costs per unit		Fixed costs per month	
Manufacturing	\$10	Manufacturing	\$33,000
Selling and administrative	<u>2</u>	Selling and administrative	<u>19,000</u>
Total	<u>\$12</u>	Total	<u>\$52,000</u>

The sales volume required for a monthly profit of \$48,000 is:

- 1,000 units
  - 1,923 units
  - 1,300 units
  - 2,500 units
5. Based on the information in question 4, with an income tax rate of 40 percent the sales volume required for a monthly after-tax profit of \$48,000 is:
- 2,000 units
  - 3,300 units
  - 2,538 units
  - 4,300 units
6. Consider the following profit-volume graph where profits/losses are plotted on the vertical axis and volume is plotted on the horizontal axis.



An increase in fixed costs accompanied by a decrease in variable costs will have the following impact on the total profit or loss line:

- Lower the vertical axis intercept and reduce the slope
- Increase the vertical axis intercept and reduce the slope
- Lower the vertical axis intercept and increase the slope
- Increase the vertical axis intercept and increase the slope

7. Alan sells two products: Y has a contribution margin ratio of 0.40 and Z has a contribution margin ratio of 0.60. A shift in the sales mix to more Product Y and less Product Z will:
- a. Reduce the break-even point and increase the slope of the profit or loss line
  - b. Increase the break-even point and reduce the slope of the profit or loss line
  - c. Increase the break-even point and increase the slope of the profit or loss line
  - d. Increase the vertical axis intercept and reduce the slope of the profit or loss line with no change in the break-even point
8. James Company reported the following for November: Sales \$80,000, variable costs \$20,000, and fixed costs \$40,000. If monthly sales increase 20 percent, profits should increase by:
- a. 20 percent
  - b. 40 percent
  - c. 60 percent
  - d. 80 percent