

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

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

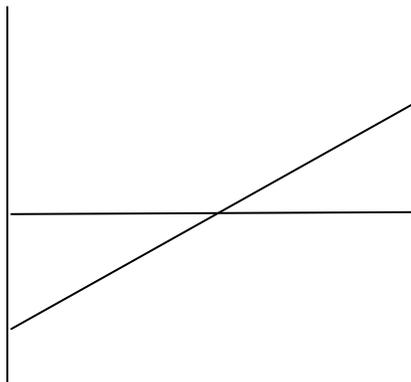
- a. \$24,000
 - b. \$43,000
 - c. \$66,000
 - d. \$45,000
3. Based on the information in Question 2, if Wanda had a \$10,000 increase in sales, profits would increase by:
- a. \$5,789
 - b. \$4,118
 - c. \$5,290
 - d. \$10,000

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:

- a. 1,000 units
 b. 1,923 units
 c. 1,300 units
 d. 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:
- a. 2,000 units
 b. 3,300 units
 c. 2,538 units
 d. 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:

- a. Lower the vertical axis intercept and reduce the slope
 b. Increase the vertical axis intercept and reduce the slope
 c. Lower the vertical axis intercept and increase the slope
 d. 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