

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) Find the slope of the line passing through the points (2, -5) and (-1, 3). 1) _____

2) Find the slope of the line $x = -2$. 2) _____

Find the equation for the line described.

3) the line passing through the point (2, 3) and having slope -4 3) _____

4) Find the equation of the line passing through the point (1, 3) and parallel to the line $y = -5x + 2$. 4) _____

5) perpendicular to $y = 2x + 5$ and passing through the point (3, 11). 5) _____

6) the line that crosses the x-axis at $x = 2$ and the y-axis at $y = -4$ 6) _____

7) parallel to the x-axis with y-intercept of (0, 5) 7) _____

Solve the problem.

8) Suppose a manufacturer finds that the cost y of producing x units is given by a formula of the form $y = mx + b$. If it costs \$8200 to produce 20 units and \$14,500 to produce 50 units, what is the marginal cost? 8) _____

9) Suppose a manufacturer finds that the cost y of producing x units is given by a formula of the form $y = mx + b$. If it costs \$1300 to produce 20 units and \$1750 to produce 35 units, what is the fixed cost? 9) _____

10) Suppose a manufacturer finds that the number of units x she produces and the cost y of producing x units are related by an equation of the form $y = mx + b$. If it costs \$2300 to produce 10 units and \$2450 to produce 15 units, what does it cost to produce 20 units? 10) _____

11) A salesman's weekly pay depends on his volume of sales. He earns \$80 each week in addition to \$10 for each item he sells. 11) _____

(a) Write an equation relating y , the salesman weekly pay, to x , the number of items he sells.

(b) How many items must he sell for his pay to be \$300.