Practice 10.5

Name(s)_____

Use the slope-intercept form to graph the equation.
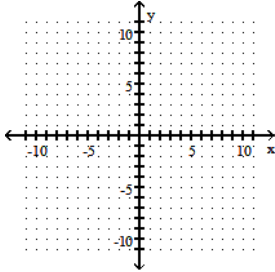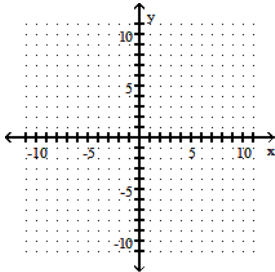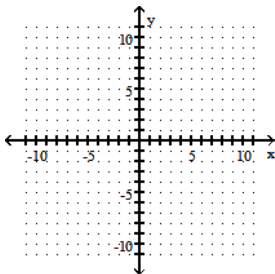
Use the equation to identify the slope and the y-intercept of the graph.

1) $y = -\dfrac{1}{3}x + 3$

4) $y = \dfrac{13}{4}x - 6$

5) $-2x + 4y = 12$

2) $7x + y = 0$

6) $y - 4 = 1$

3) $x = -\dfrac{3}{2}y$

Find an equation of the line with the given slope that passes through the given point. Write the equation in the form Ax + By = C.

7) $m = -\dfrac{4}{9}$; (5, 2)

8) $m = \dfrac{1}{4}$; (-9, 2)

Find an equation of the line passing through each pair of points. Write the equation in the form Ax + By = C.

9) (-6, 2) and (-1, 5)

10) Through (1, 6) and parallel to the y-axis.

Solve. Assume the exercise describes a linear relationship. When writing a linear equation, write the equation in slope-intercept form.

11) An investment is worth $3038 in 1991. By 1996 it has grown to $4908. Let y be the value of the investment in the year x, where x = 0 represents 1991. Write a linear equation that models the value of the investment in the year x.
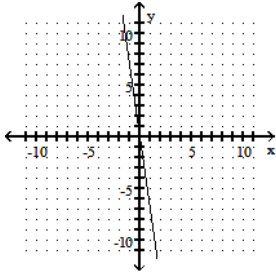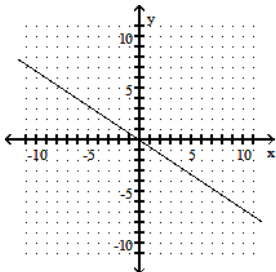
1)
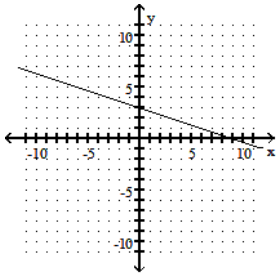
2)

3)

4) $m = \dfrac{13}{4}$; (0, -6)

5) $m = \dfrac{1}{2}$; (0, 3)

6) $m = 0$; (0, 5)

7) $4x + 9y = 38$

8) $x - 4y = -17$

9) $3x - 5y = -28$

10) $x = 1$

11) $y = 374x + 3038$

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