

## Slope, Slope-Intercept Form, Point-Slope Form

**Write the slope-intercept form of the equation of each line given the slope and y-intercept.**

1) Slope =  $-\frac{6}{5}$ , y-intercept = 4

2) Slope = 7, y-intercept = -3

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

3) through:  $(-1, -3)$ , slope = 6

4) through:  $(4, 1)$ , slope = 1

5) through:  $(-2, 3)$ , slope = 1

6) through:  $(-5, -2)$ , slope = -3

**Write the point-slope form of the equation of the line through the given point with the given slope.**

7) through:  $(-5, -3)$ , slope =  $-\frac{1}{5}$

8) through:  $(-1, 5)$ , slope = -9

9) through:  $(-5, 0)$ , slope =  $-\frac{4}{5}$

10) through:  $(-2, -5)$ , slope =  $\frac{1}{2}$

**Write the point-slope form of the equation of the line through the given points.**

11) through:  $(-2, 2)$  and  $(0, 1)$

12) through:  $(-1, 3)$  and  $(0, 0)$

13) through:  $(-2, 3)$  and  $(2, 1)$

14) through:  $(-4, 0)$  and  $(0, -1)$

**Write the slope-intercept form of the equation of the line through the given points. Use point-slope form.**

15) through:  $(-2, -1)$  and  $(-5, 4)$

16) through:  $(1, -3)$  and  $(0, -1)$

17) through:  $(-5, 0)$  and  $(-4, 4)$

18) through:  $(-5, -2)$  and  $(0, -4)$

## Answers to Slope, Slope-Intercept Form, Point-Slope Form

$$1) y = -\frac{6}{5}x + 4$$

$$2) y = 7x - 3$$

$$3) y = 6x + 3$$

$$4) y = x - 3$$

$$5) y = x + 5$$

$$6) y = -3x - 17$$

$$7) y + 3 = -\frac{1}{5}(x + 5)$$

$$8) y - 5 = -9(x + 1)$$

$$9) y = -\frac{4}{5}(x + 5)$$

$$10) y + 5 = \frac{1}{2}(x + 2)$$

$$11) y - 2 = -\frac{1}{2}(x + 2)$$

$$12) y - 3 = -3(x + 1)$$

$$13) y - 3 = -\frac{1}{2}(x + 2)$$

$$14) y = -\frac{1}{4}(x + 4)$$

$$15) y = -\frac{5}{3}x - \frac{13}{3}$$

$$16) y = -2x - 1$$

$$17) y = 4x + 20$$

$$18) y = -\frac{2}{5}x - 4$$