

## Assignment on Writing Linear Equations

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

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

2) through:  $(4, 1)$  and  $(0, 2)$

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

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

5) through:  $(-3, 2)$  and  $(-3, -4)$

6) through:  $(1, -2)$  and  $(1, 5)$

7) through:  $(4, 1)$  and  $(-5, -1)$

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

9) through:  $(-2, 4)$  and  $(-3, -3)$

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

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

11) through:  $(2, 5)$ , slope =  $-9$

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

13) through:  $(-1, 4)$ , slope =  $-3$

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

15) through:  $(-2, 3)$ , slope =  $0$

16) through:  $(1, 4)$ , slope =  $0$

17) through:  $(2, -3)$ , slope =  $-7$

18) through:  $(2, 1)$ , slope =  $3$

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

20) through:  $(5, 5)$ , slope =  $2$

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

22) through:  $(3, 4)$ , slope =  $1$

Algebra 1

Name \_\_\_\_\_

Period \_\_\_\_\_

## Writing Equations of Parallel and Perpendicular Lines

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Write the slope-intercept form of the equation of the line described.

1) through:  $(2, 2)$ , parallel to  $y = x + 4$ 2) through:  $(4, 3)$ , parallel to  $x = 0$ 3) through:  $(2, -4)$ , parallel to  $y = 3x + 2$ 4) through:  $(2, -1)$ , parallel to  $y = -\frac{2}{5}x + 3$ 5) through:  $(1, -5)$ , perp. to  $y = \frac{1}{8}x + 2$ 6) through:  $(4, -1)$ , perp. to  $y = x + 2$

7) through:  $(-5, 5)$ , perp. to  $y = \frac{5}{9}x - 4$

8) through:  $(3, 4)$ , perp. to  $y = -2x - 4$

**Write the standard form of the equation of the line described.**

9) through:  $(4, 4)$ , parallel to  $y = -6x + 5$

10) through:  $(-5, 5)$ , parallel to  $y = -3x + 3$

11) through:  $(3, -2)$ , perp. to  $y = 5x + 4$

12) through:  $(3, 1)$ , perp. to  $y = -\frac{2}{3}x + 4$

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**Write the standard form of the equation of each line.**

13)  $y = 3x + 1$

14)  $y = -\frac{9}{5}x + 3$

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