

## Writing Linear Equations

Write the slope-intercept form of the equation of each line. then Graph

1)  $3x - 2y = -16$

2)  $13x - 11y = -12$

3)  $9x - 7y = -7$

4)  $x - 3y = 6$

5)  $6x + 5y = -15$

6)  $4x - y = 1$

7)  $11x - 4y = 32$

8)  $11x - 8y = -48$

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

9) through:  $(1, 2)$ , slope = 7

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

11) through:  $(-2, 5)$ , slope = -4

12) through:  $(3, 5)$ , slope =  $\frac{5}{3}$

13) through:  $(2, -4)$ , slope =  $-1$

14) through:  $(2, 5)$ , slope = undefined

15) through:  $(3, 1)$ , slope =  $\frac{1}{2}$

16) through:  $(-1, 2)$ , slope =  $2$

**Write the point-slope form of the equation of the line described.**

17) through:  $(4, 2)$ , parallel to  $y = -\frac{3}{4}x - 5$

18) through:  $(-3, -3)$ , parallel to  $y = \frac{7}{3}x + 3$

19) through:  $(-4, 0)$ , parallel to  $y = \frac{3}{4}x - 2$

20) through:  $(-1, 4)$ , parallel to  $y = -5x + 2$

21) through:  $(2, 0)$ , ~~parallel~~ <sup>perpendicular</sup> to  $y = \frac{1}{3}x + 3$

22) through:  $(4, -4)$ , ~~parallel~~ <sup>perpendicular</sup> to  $y = -x - 4$

23) through:  $(-2, 4)$ , parallel to  $y = -\frac{5}{2}x + 5$

24) through:  $(-4, -1)$ , ~~parallel~~ <sup>perpendicular</sup> to  $y = -\frac{1}{2}x - 1$