Writing Linear Equations

Date_____ Period____

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

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 to $y = \frac{1}{3}x + 3$

22) through: $(4, -4)$, parallel to $y = -x - 4$

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

24) through: $(-4, -1)$, parallel to $y = -\frac{1}{2}x - 1$

Writing Linear Equations

Date_____ Period____

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

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

$y = \frac{3}{2}x + 8$

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

$y = \frac{13}{11}x + \frac{12}{11}$

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

$y = \frac{9}{7}x + 1$

4) $x - 3y = 6$

$y = \frac{1}{3}x - 2$

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

$y = -\frac{6}{5}x - 3$

6) $4x - y = 1$

$y = 4x - 1$

7) $11x - 4y = 32$

$y = \frac{11}{4}x - 8$

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

$y = \frac{11}{8}x + 6$

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

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

$7x - y = 5$

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

$x + y = 2$

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

$4x + y = -3$

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

$5x - 3y = 0$

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

$x + y = -2$

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

$x = 2$

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

$x - 2y = 1$

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

$2x - y = -4$

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

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

$y - 2 = -\frac{3}{4}(x - 4)$

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

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

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

$y = \frac{3}{4}(x + 4)$

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

$y - 4 = -5(x + 1)$

21) through: $(2, 0)$, parallel to $y = \frac{1}{3}x + 3$

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

22) through: $(4, -4)$, parallel to $y = -x - 4$

$y + 4 = -(x - 4)$

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

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

24) through: $(-4, -1)$, parallel to $y = -\frac{1}{2}x - 1$

$y + 1 = -\frac{1}{2}(x + 4)$