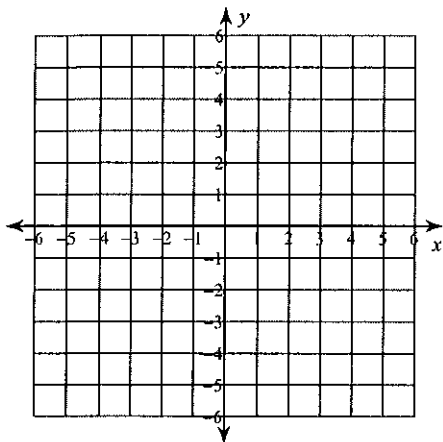


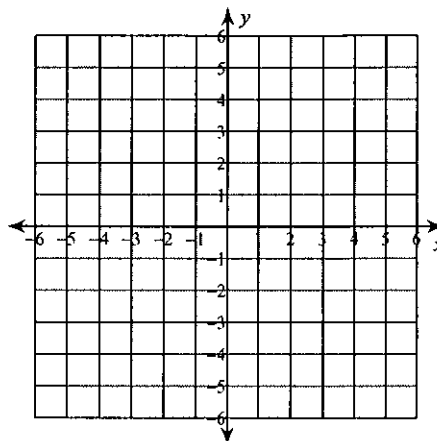
## Graphing Lines

Sketch the graph of each line.

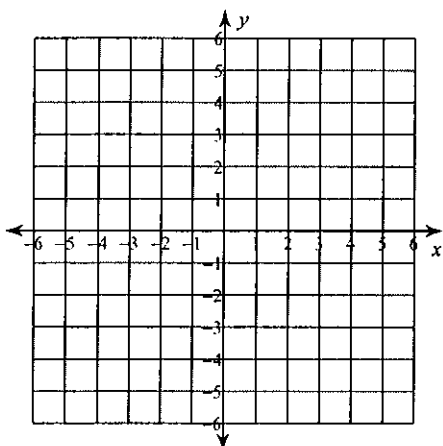
1)  $y = \frac{7}{2}x - 2$



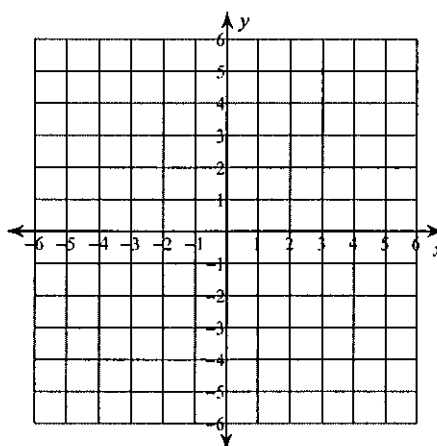
2)  $y = -6x + 3$



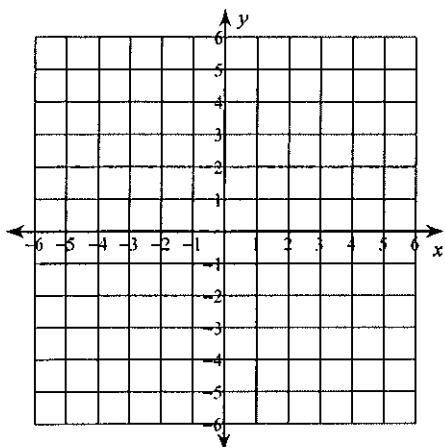
3)  $y = -5$



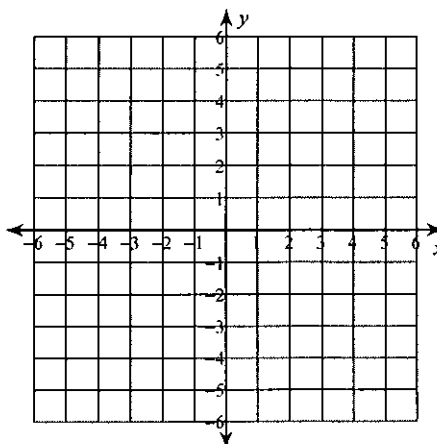
4)  $y = \frac{6}{5}x + 1$



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



6)  $x = 5$



## Finding Slope From Two Points

Find the slope of the line through each pair of points.

1)  $(19, -16), (-7, -15)$

2)  $(1, -19), (-2, -7)$

3)  $(-4, 7), (-6, -4)$

4)  $(20, 8), (9, 16)$

5)  $(17, -13), (17, 8)$

6)  $(19, 3), (20, 3)$

7)  $(3, 0), (-11, -15)$

8)  $(19, -2), (-11, 10)$

## Writing Linear Equations

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

$$y = mx + b$$

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)  $11x - 8y = -48$

$$Ax + By = C$$

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 =  $\frac{5}{3}$

## Writing Equations of Parallel and Perpendicular Lines

Period \_\_\_\_\_

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

$$y = mx + b$$

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.

$$Ax + By = C$$

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

Write the standard form of the equation of each line.

$$Ax + By = C$$

13)  $y = 3x + 1$

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

15) Slope = 1, y-intercept = 0

16) Slope =  $-\frac{7}{2}$ , y-intercept = 2

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

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

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

$$y = mx + b$$

19)  $y - 1 = 2(x - 2)$

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