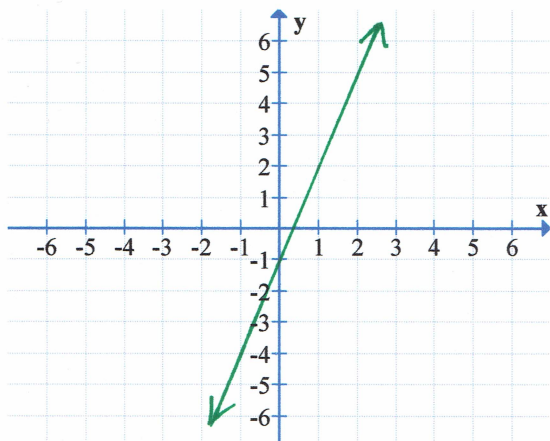First write the correct slope under its graph. Then write the correct equation under its graph.

Slopes: $m = \frac{3}{4}$, $\qquad m = -\frac{5}{2}$, $\qquad m = 3$, $\qquad m = 0$, $\qquad m = $ undefined, $\qquad m = -2$

Equations: $y = -4$, $\quad y = \frac{3}{4}x + 1$, $\quad x = 2$, $\quad y = -\frac{5}{2}x + 1$, $\quad y = -2x + 3$, $\quad y = 3x - 1$

1)

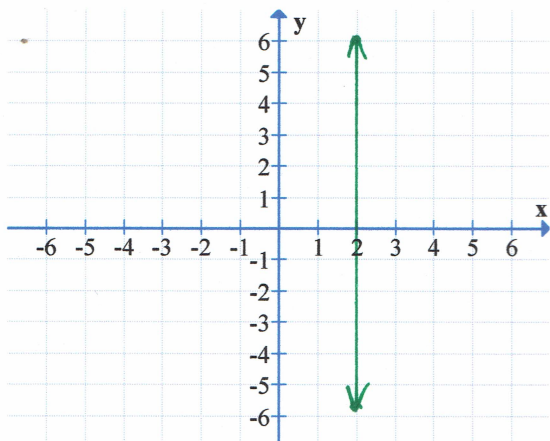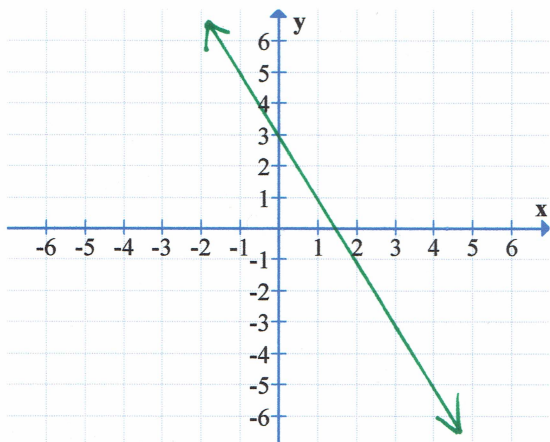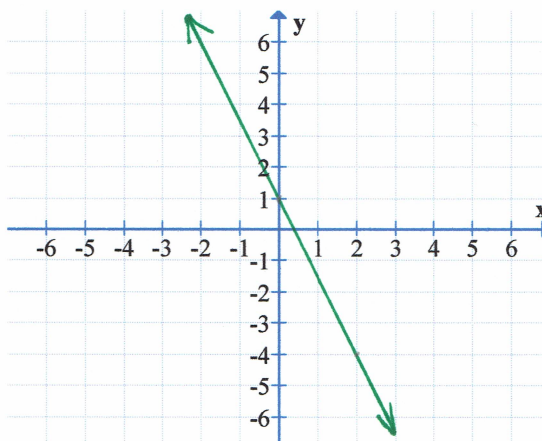slope: m =   equation:

4)

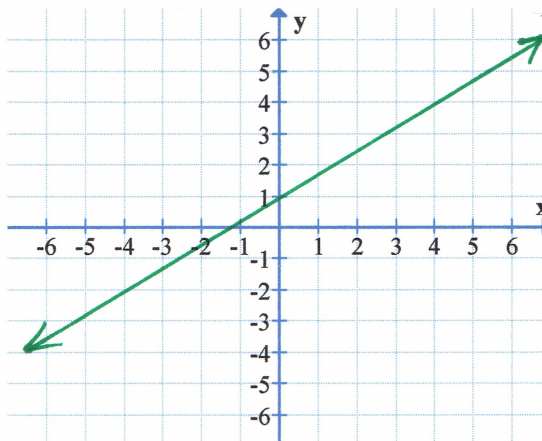slope: m =   equation:

2)

slope: m =   equation:

5)

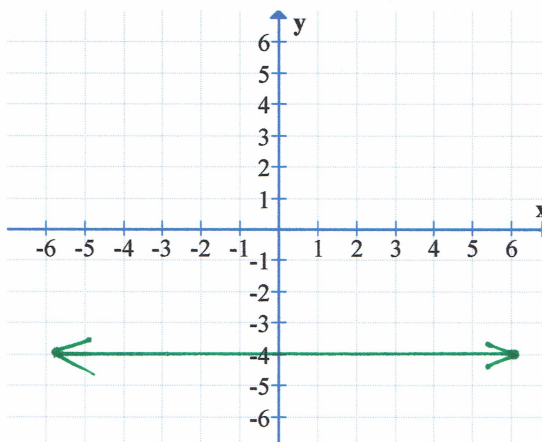slope: m =   equation:

3)

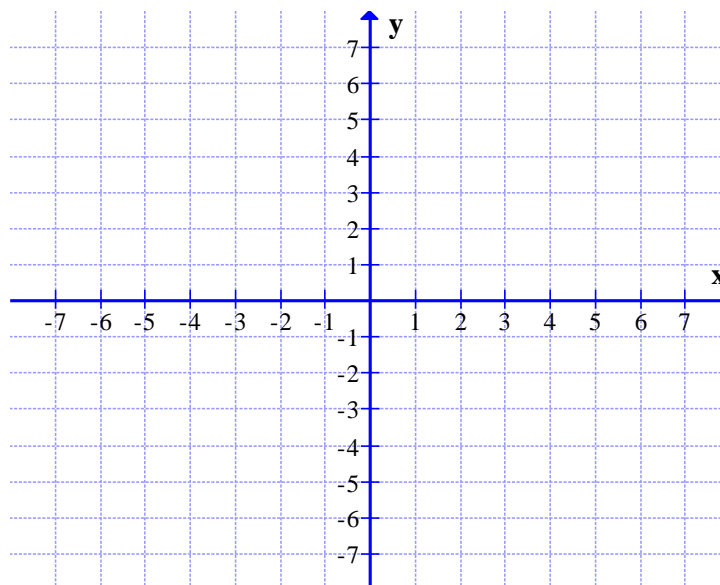slope: m =   equation:

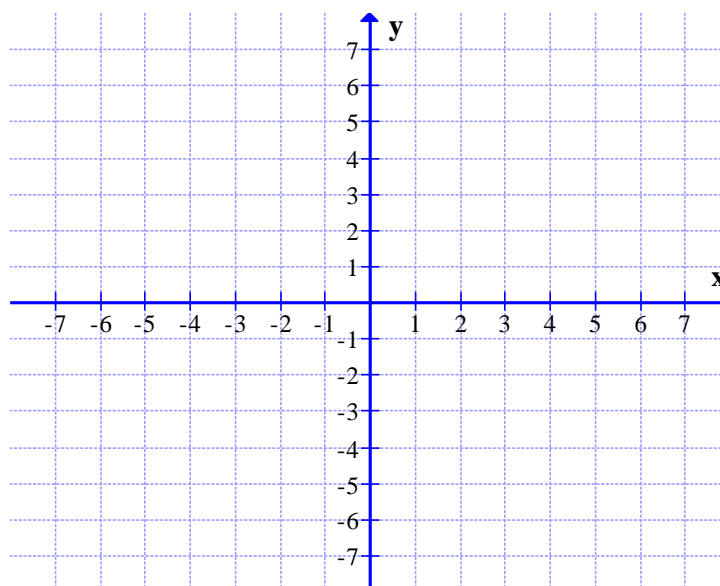6)

slope: m =   equation:

1

7) Graph the equation, without

using an "x y table." $y = \dfrac{1}{3}x + 2$
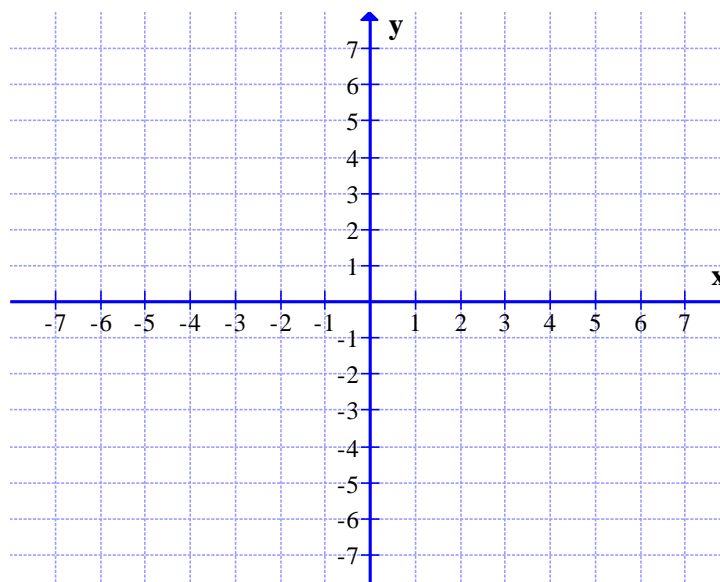
8) Graph the equation without

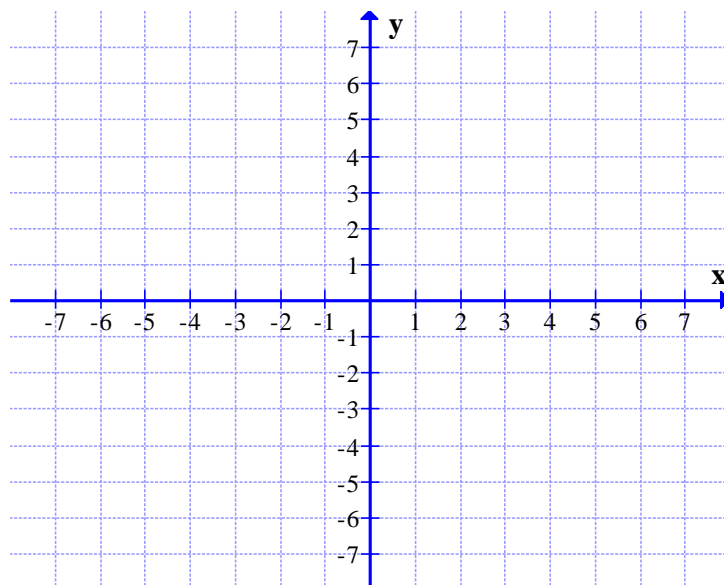using an "x y table." $y = -\dfrac{4}{7}x + 3$

9) Graph the equation without
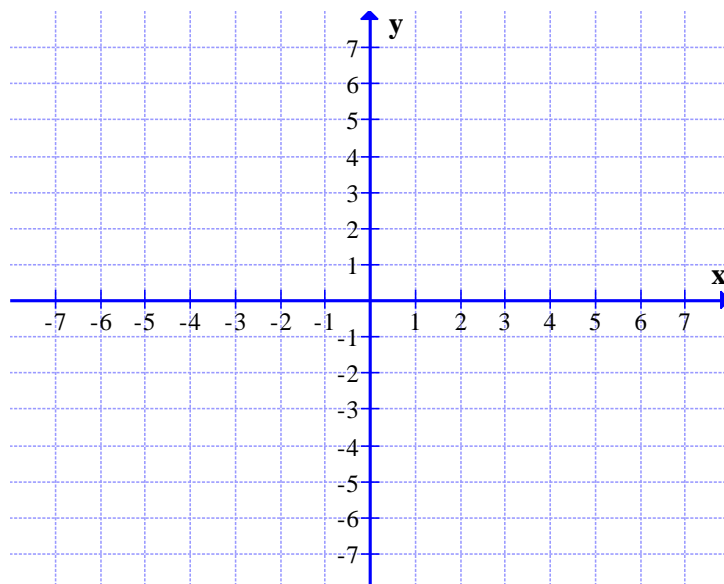
using an "x y table." $y = \dfrac{2}{5}x$

2

10) Graph the equation, without

using an "x y table." $\quad y = -3x + 7$

11) Graph the equation without

using an "x y table." $\quad y = \dfrac{1}{6}x$

12) Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $\quad 5x + 3y = 18$

13) Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $-10y + 4x = 30$

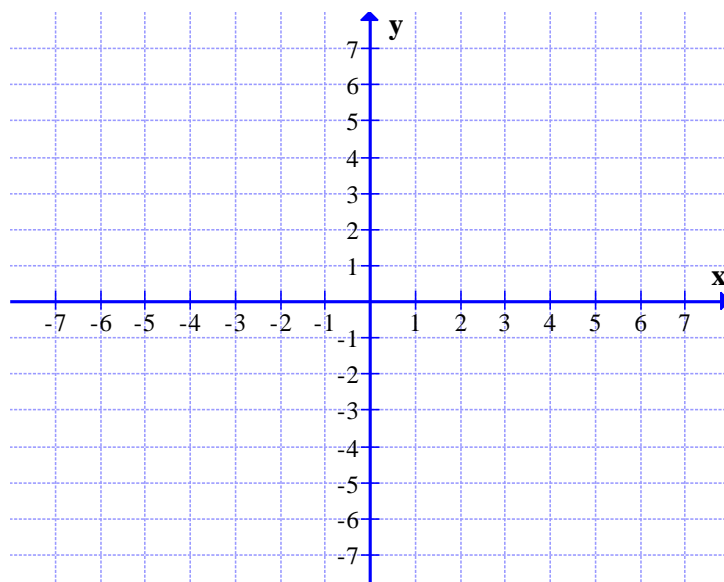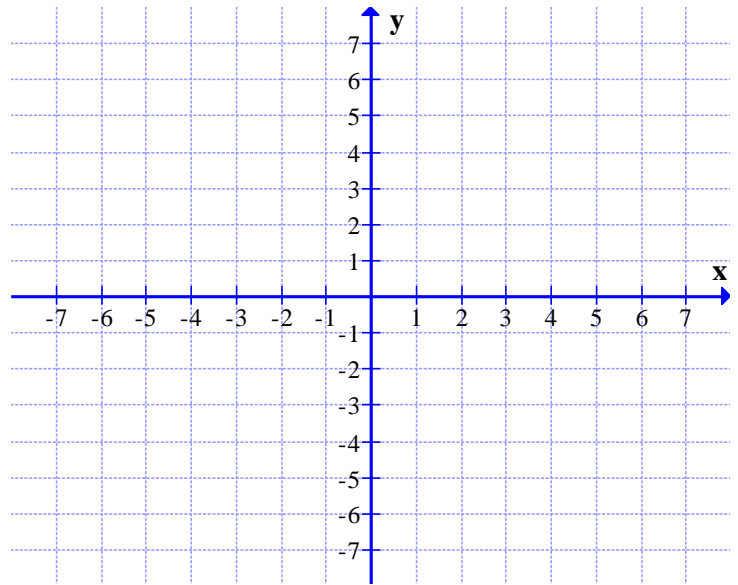*14)* Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $-6x + 3y = -21$
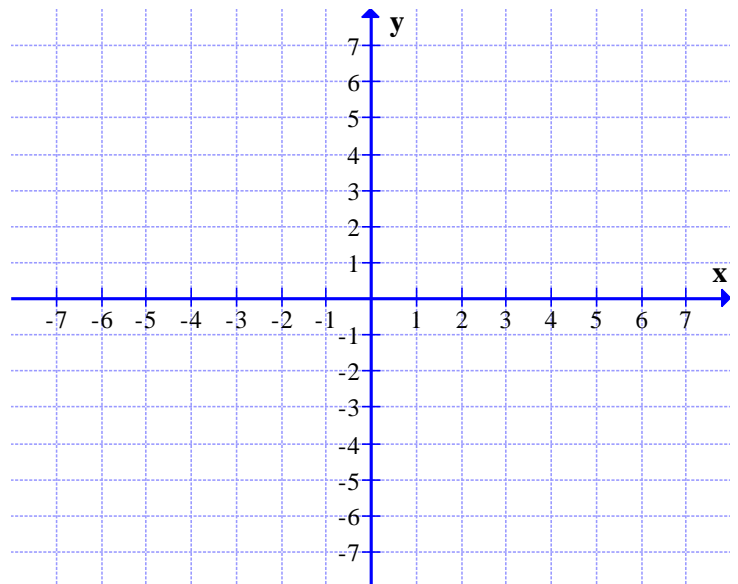
15) Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $-2x + 7y = 0$

4

16) Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $15x - 5y = -20$
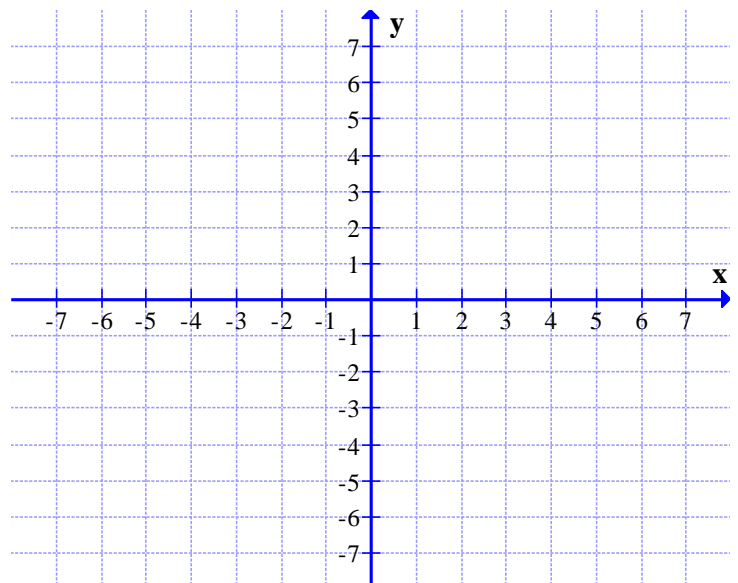
17) Rearrange the following equation from standard form to slope-intercept form, and then graph the equation without using an "x y table." $2y + 8x = 0$
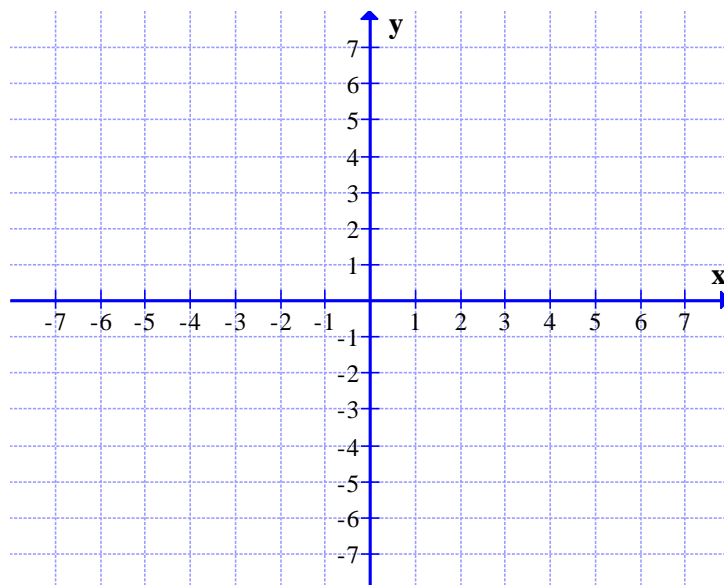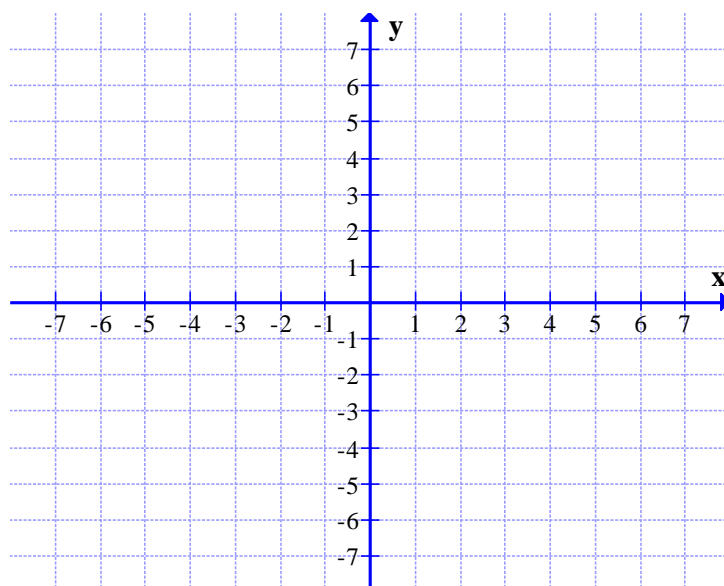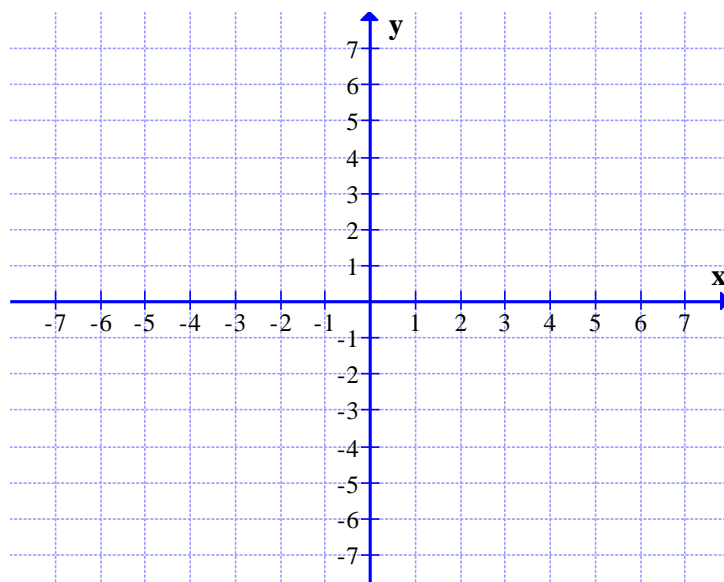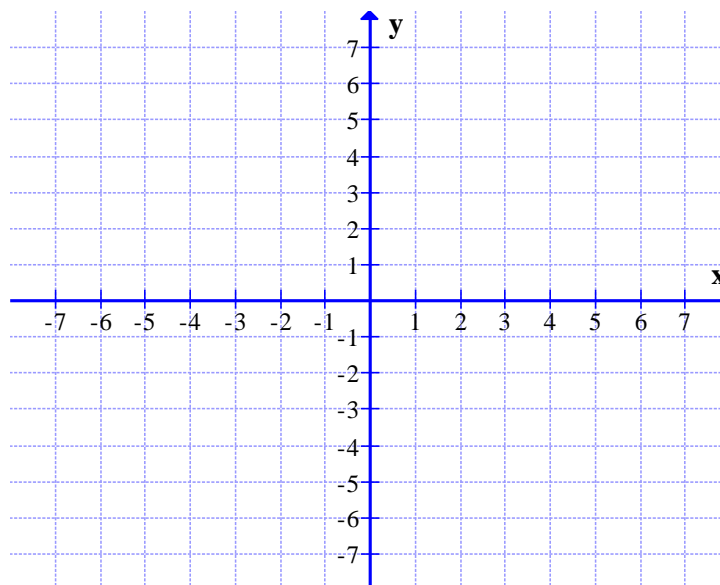
18) Graph the line using the given point and slope.
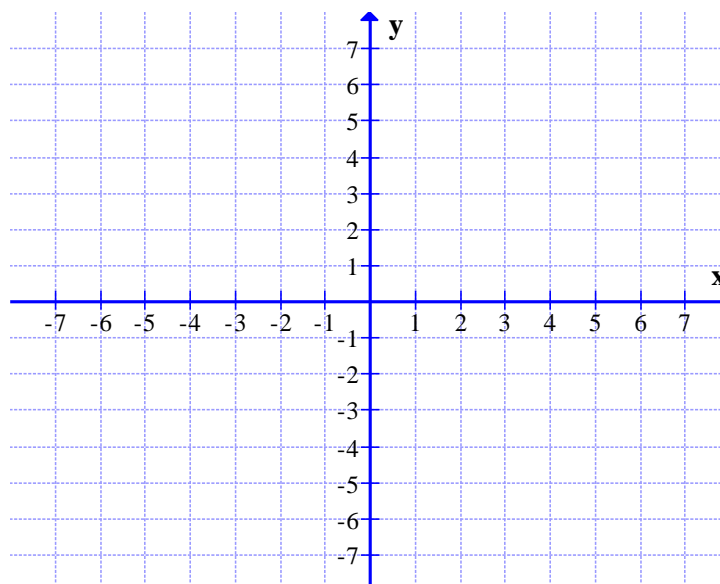
$$(2, 3), \quad m = -\frac{4}{5}$$

5

19) Graph the line using the given point and slope.
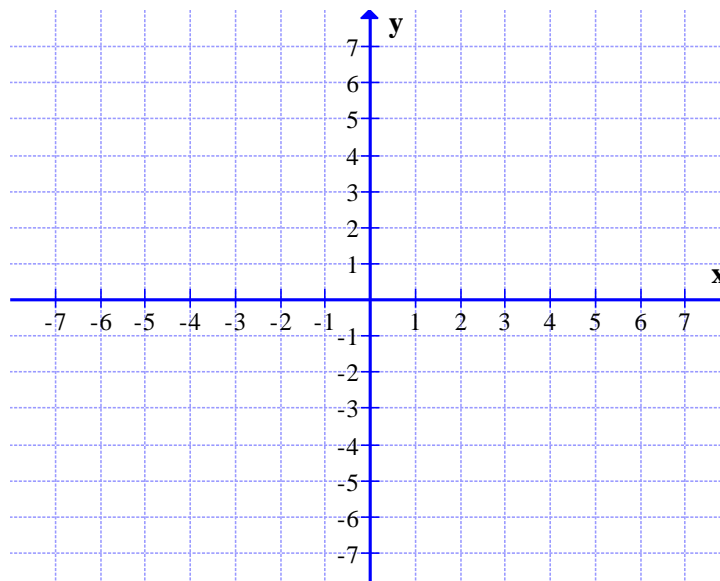
$$(-4, -1), \quad m = \frac{3}{7}$$

20) Graph the line using the given point and slope.

$$(-2, 1), \quad m = 4$$

21) Graph the line using the given point and slope.

$$(3, 5), \quad m = 0$$

22) Graph the line using the given point and slope.

$$(2, -3), \quad m = \text{undefined}$$

For each of the next four problems, you are given two points and you are to find the slope. You will use the slope formula.

(Try to write it from memory; it's at bottom of page.)

slope formula: $m =$

23) Given two points, find the slope.

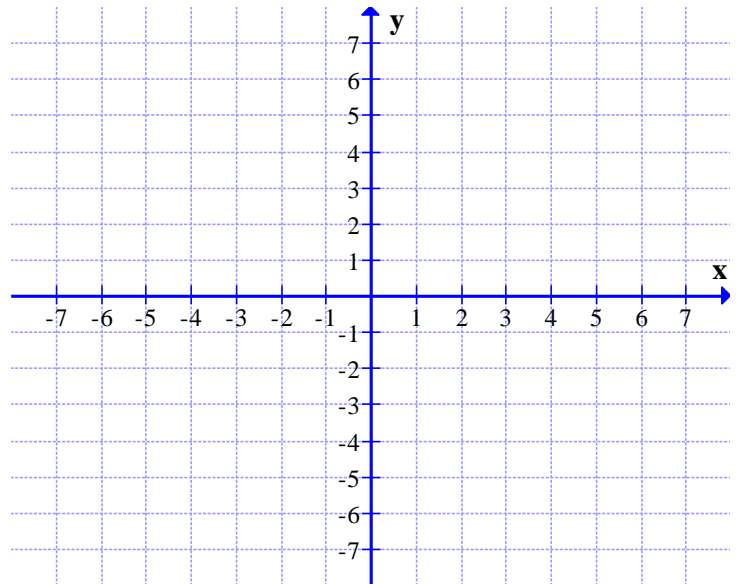$$(-5, 2), \ (4, 7)$$

24) Given two points, find the slope.

$$(1, 3), \ (-6, 3)$$

25) Given two points, find the slope.

$$(8, -6), \ (1, 4)$$

26) Given two points, find the slope.

$$(5, 1), \ (5, 9)$$

Determine whether each pair of lines is parallel, perpendicular, or neither.

27) $y = -\dfrac{5}{7}x + 3$

$y = \dfrac{7}{5} - 2$

28) $y = \dfrac{4}{9}x + 7$

$y = \dfrac{3}{11}x - 5$

29) $y = \dfrac{2}{3}x + 5$

$-2x + 3y = 24$ (Rearrange to slope-intercept form to compare the slope to the equation above.)

Slope formula: $m = \dfrac{y_2 - y_1}{x_2 - x_1}$