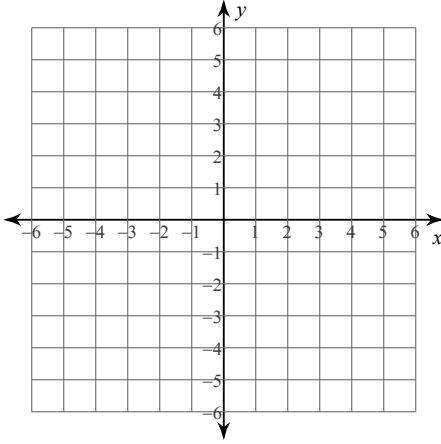


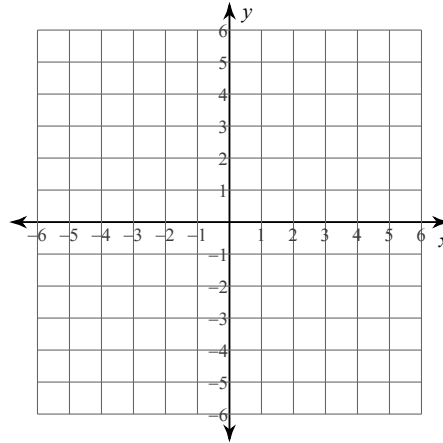
Graphing Lines

Sketch the graph of each line.

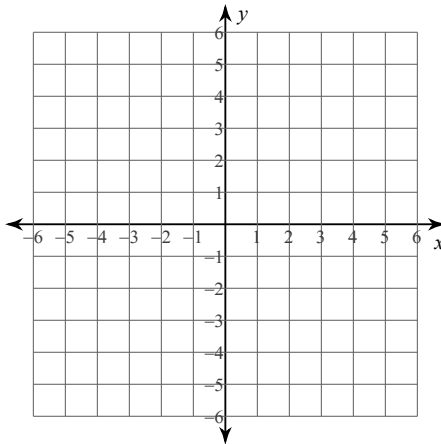
1) $y = \frac{7}{2}x - 2$



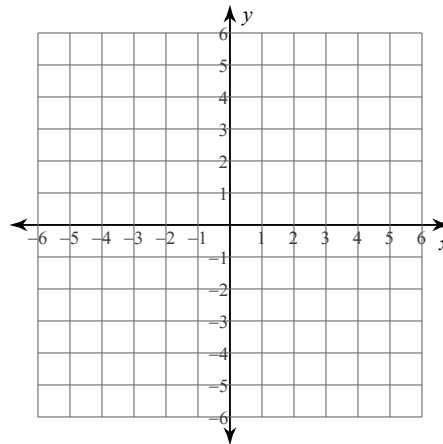
2) $y = -6x + 3$



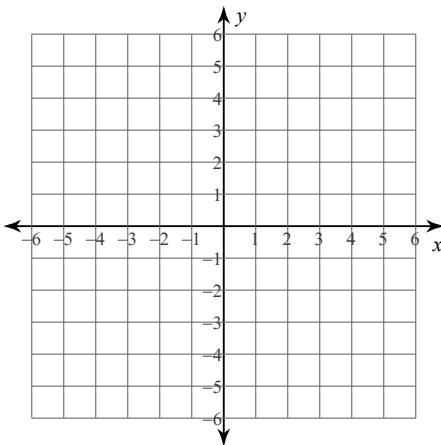
3) $y = -5$



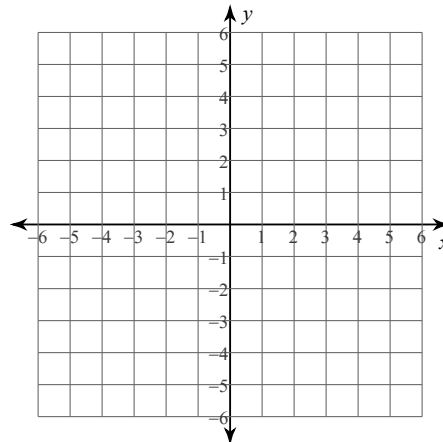
4) $y = \frac{6}{5}x + 1$



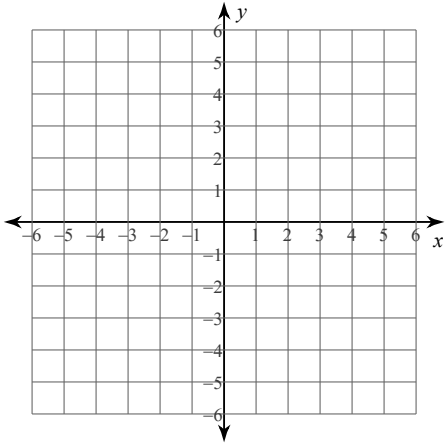
5) $y = \frac{1}{4}x + 2$



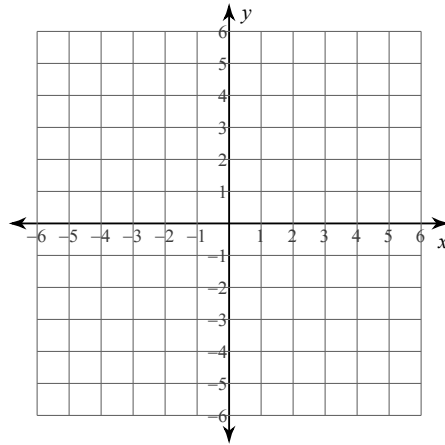
6) $x = 5$



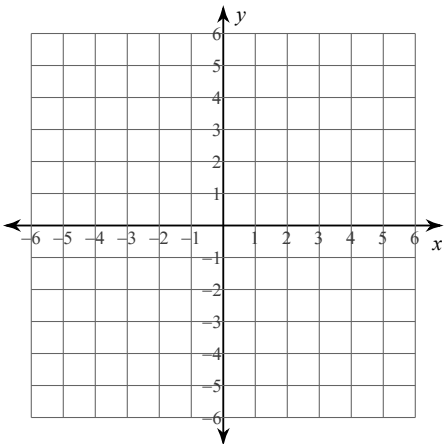
7) $y = \frac{5}{3}x$



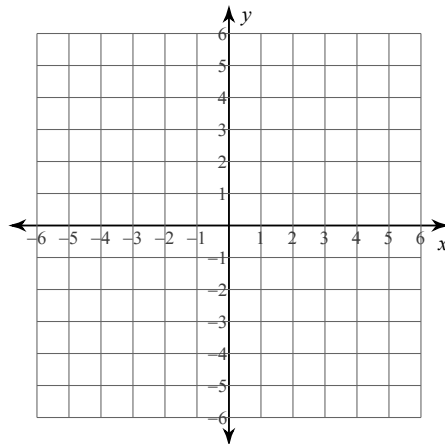
8) $x = 0$



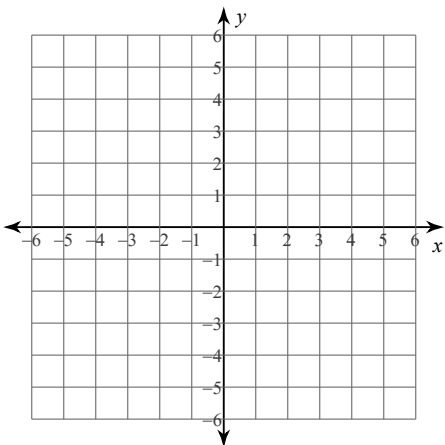
9) $y = -\frac{1}{3}x + 3$



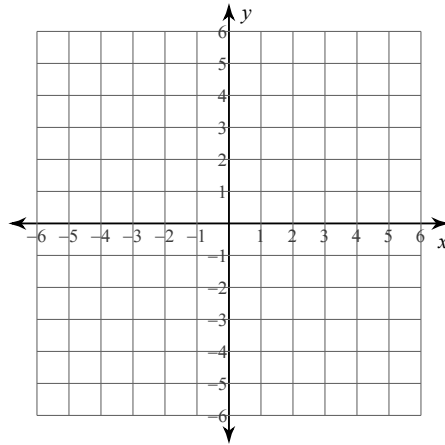
10) $y = \frac{1}{5}x - 4$



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



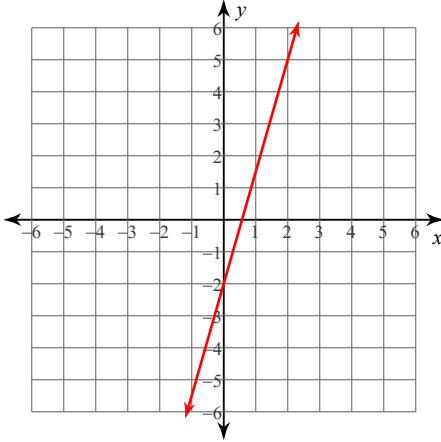
12) $y = 2x + 5$



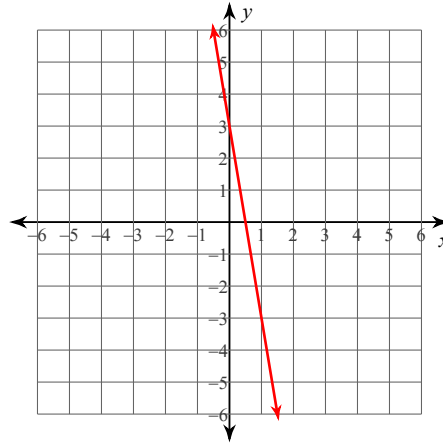
Graphing Lines

Sketch the graph of each line.

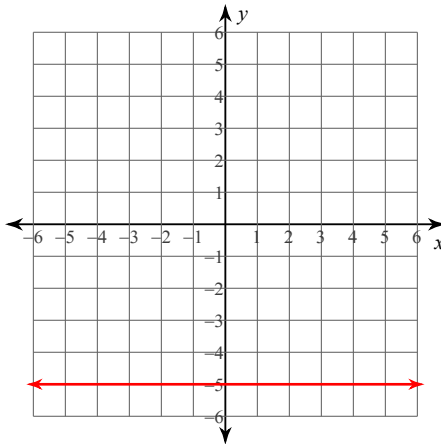
1) $y = \frac{7}{2}x - 2$



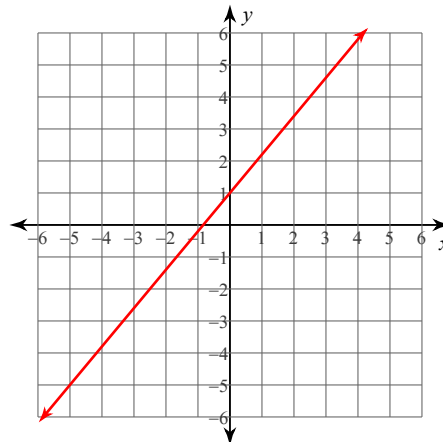
2) $y = -6x + 3$



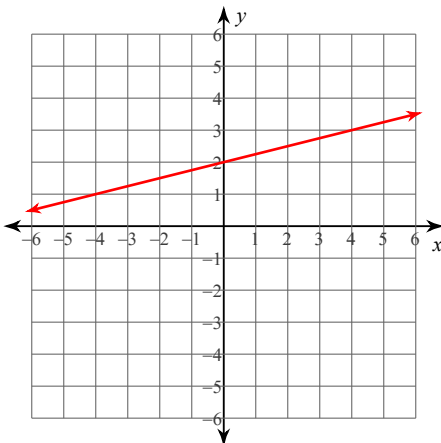
3) $y = -5$



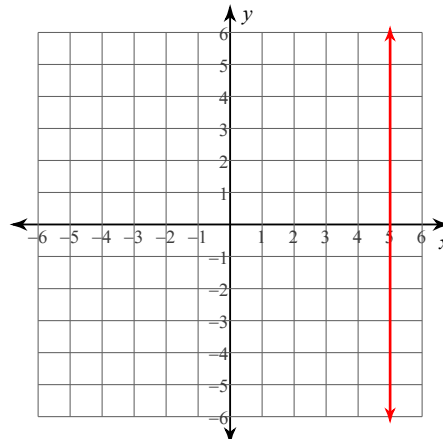
4) $y = \frac{6}{5}x + 1$



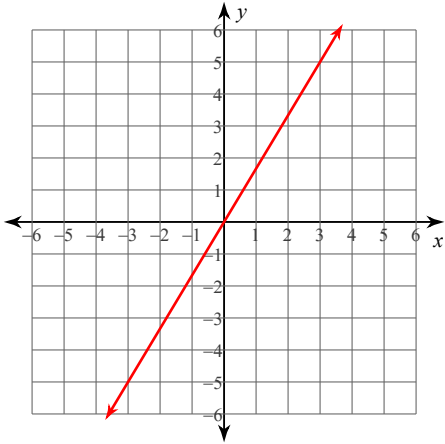
5) $y = \frac{1}{4}x + 2$



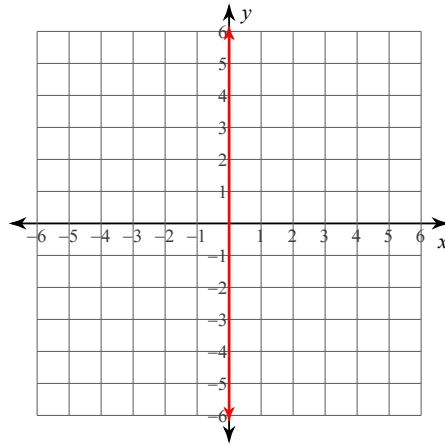
6) $x = 5$



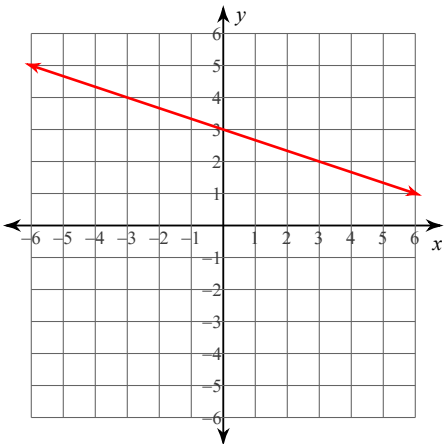
$$7) y = \frac{5}{3}x$$



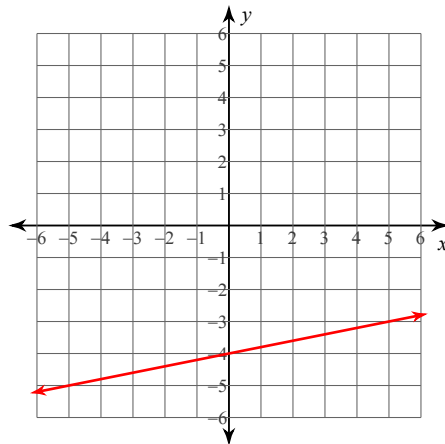
$$8) x = 0$$



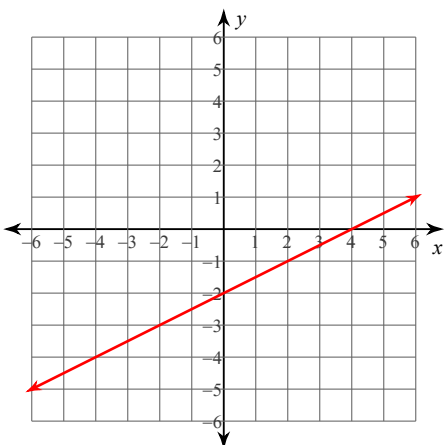
$$9) y = -\frac{1}{3}x + 3$$



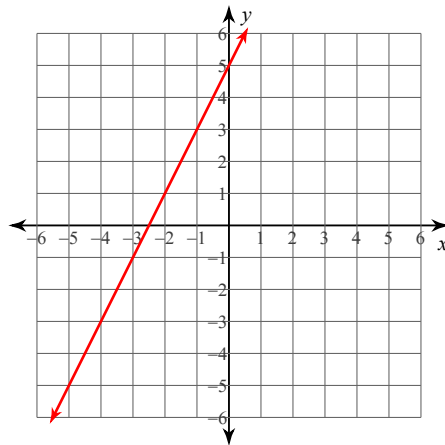
$$10) y = \frac{1}{5}x - 4$$



$$11) y = \frac{1}{2}x - 2$$



$$12) y = 2x + 5$$



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

9) $(6, -10), (-15, 15)$

10) $(12, -18), (-15, -18)$

11) $(3, -20), (5, 8)$

12) $(15, 8), (-17, 9)$

13) $(-19, 12), (-9, 1)$

14) $(12, 2), (-7, 5)$

15) $(6, -12), (15, -3)$

16) $(9, 3), (19, -17)$

Finding Slope From Two Points

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

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

$$-\frac{1}{26}$$

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

$$-4$$

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

$$\frac{11}{2}$$

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

$$-\frac{8}{11}$$

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

Undefined

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

0

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

$$\frac{15}{14}$$

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

$$-\frac{2}{5}$$

9) $(6, -10), (-15, 15)$

$$-\frac{25}{21}$$

10) $(12, -18), (-15, -18)$

$$0$$

11) $(3, -20), (5, 8)$

$$14$$

12) $(15, 8), (-17, 9)$

$$-\frac{1}{32}$$

13) $(-19, 12), (-9, 1)$

$$-\frac{11}{10}$$

14) $(12, 2), (-7, 5)$

$$-\frac{3}{19}$$

15) $(6, -12), (15, -3)$

$$1$$

16) $(9, 3), (19, -17)$

$$-2$$

Writing Linear Equations

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

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

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