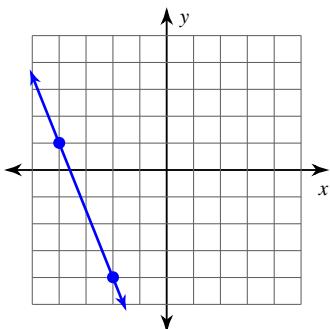


Parallel Lines in the Coordinate Plane

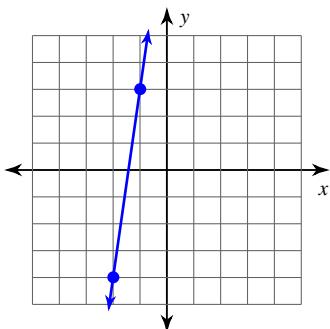
Date_____ Period____

Find the slope of each line.

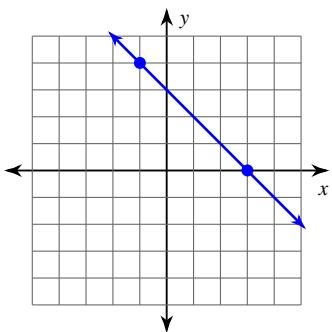
1)



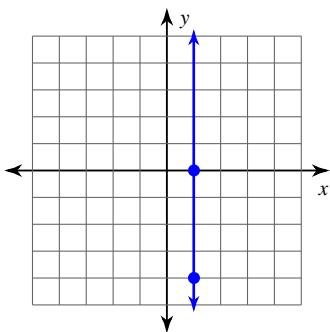
2)



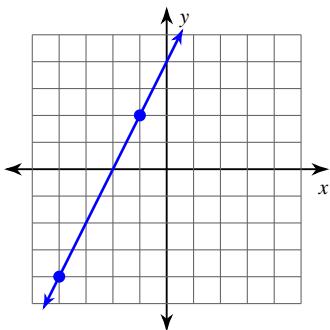
3)



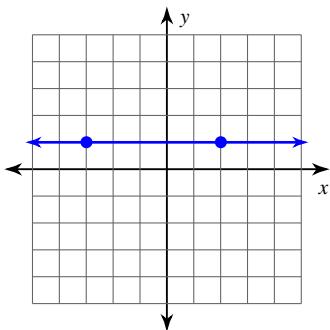
4)



5)



6)



7) $y = -\frac{1}{3}x - 4$

8) $y = 2x - 2$

9) $x = -1$

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

$$11) \ y = -\frac{7}{5}x - 3$$

$$12) \ y = -\frac{5}{4}x - 2$$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

$$13) \text{ Slope} = -3, \text{ y-intercept} = -1$$

$$14) \text{ Slope} = \frac{5}{3}, \text{ y-intercept} = -3$$

$$15) \text{ Slope} = -1, \text{ y-intercept} = 3$$

$$16) \text{ Slope} = \frac{2}{5}, \text{ y-intercept} = 1$$

$$17) \text{ Slope} = 3, \text{ y-intercept} = 0$$

$$18) \text{ Slope} = -\frac{1}{2}, \text{ y-intercept} = 4$$

Find the slope of a line parallel to each given line.

$$19) \ y = 2x - 5$$

$$20) \ y = 2x - 4$$

$$21) \ y = \frac{4}{5}x - 3$$

$$22) \ y = -\frac{8}{3}x - 4$$

$$23) \ y = -x - 2$$

$$24) \ y = -2x - 1$$

Critical thinking questions:

25) Fill in the blank so that the lines are not parallel:

Line A goes through Line B goes through

$$\underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$$

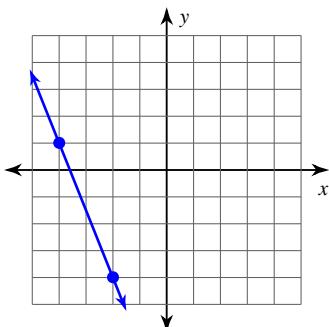
$$(0, 8) \text{ and } (-2, 0) \quad (1, 2) \text{ and } (3, \underline{\hspace{1cm}})$$

26) Write the equations of five lines that are parallel to $y = \frac{x}{2} - 6$

Parallel Lines in the Coordinate Plane

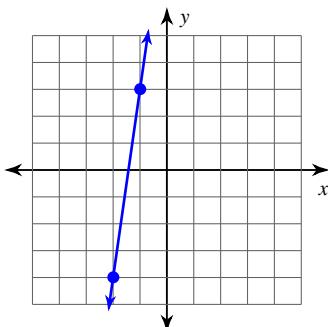
Find the slope of each line.

1)



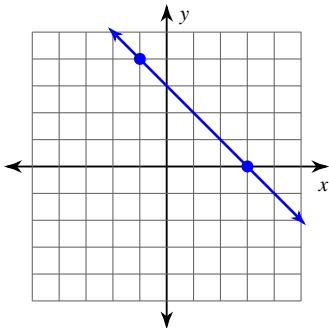
$$-\frac{5}{2}$$

2)



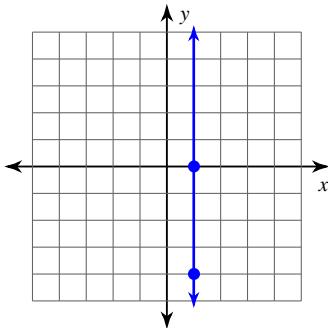
$$7$$

3)



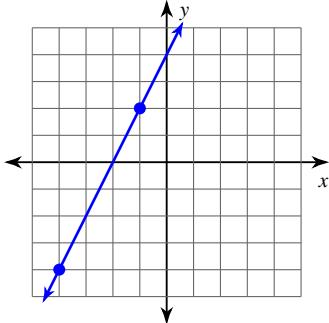
$$-1$$

4)



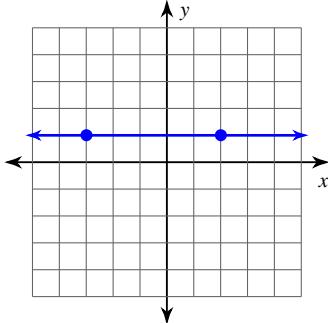
$$\text{Undefined}$$

5)



$$2$$

6)



$$0$$

7) $y = -\frac{1}{3}x - 4$

$$-\frac{1}{3}$$

9) $x = -1$

Undefined

8) $y = 2x - 2$

$$2$$

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

$$\frac{3}{2}$$

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

$$-\frac{7}{5}$$

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

$$-\frac{5}{4}$$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

13) Slope = -3 , y-intercept = -1

$$y = -3x - 1$$

15) Slope = -1 , y-intercept = 3

$$y = -x + 3$$

17) Slope = 3 , y-intercept = 0

$$y = 3x$$

14) Slope = $\frac{5}{3}$, y-intercept = -3

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

16) Slope = $\frac{2}{5}$, y-intercept = 1

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

18) Slope = $-\frac{1}{2}$, y-intercept = 4

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

Find the slope of a line parallel to each given line.

19) $y = 2x - 5$

$$2$$

20) $y = 2x - 4$

$$2$$

21) $y = \frac{4}{5}x - 3$

$$\frac{4}{5}$$

22) $y = -\frac{8}{3}x - 4$

$$-\frac{8}{3}$$

23) $y = -x - 2$

$$-1$$

24) $y = -2x - 1$

$$-2$$

Critical thinking questions:

25) Fill in the blank so that the lines are not parallel:

Line A goes through Line B goes through
 _____ $(0, 8)$ and $(-2, 0)$ $(1, 2)$ and $(3, \underline{\hspace{2cm}})$

Anything but 10

26) Write the equations of five lines that are

parallel to $y = \frac{x}{2} - 6$

Many answers. Ex: $y = \frac{x}{2} + 4$