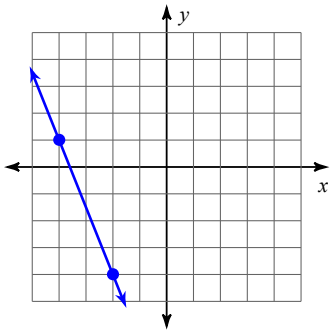
Name_____

Parallel Lines in the Coordinate Plane

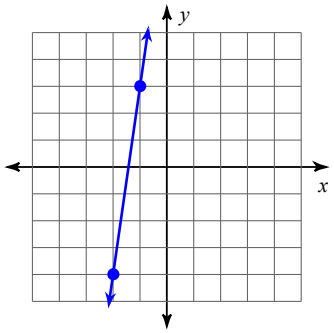
Date_____ Period____

Find the slope of each line.

1)



2)



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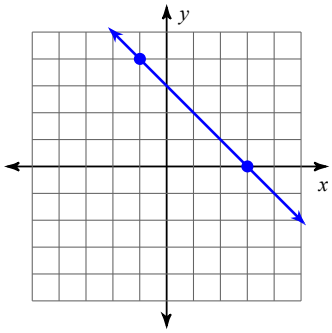

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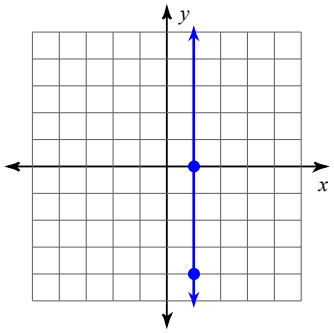

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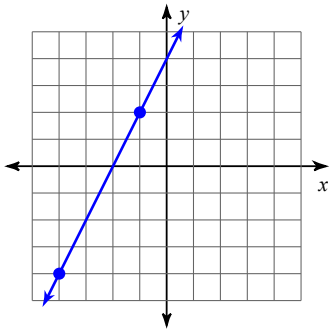
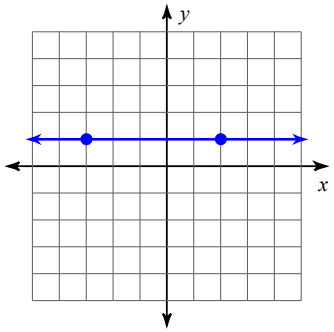


6)



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) Slope = –3, y-intercept = –1

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

15) Slope = –1, y-intercept = 3

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

17) Slope = 3, y-intercept = 0

18) Slope = $-\frac{1}{2}$, 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
$(0, 8)$ and $(-2, 0)$	$(1, 2)$ and $(3, \_\_)$

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

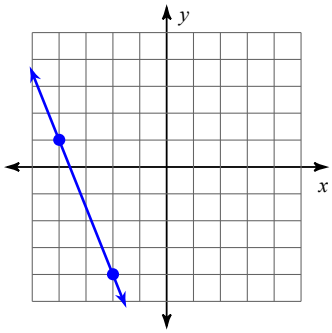
Name_____

Parallel Lines in the Coordinate Plane

Date_____ Period____

Find the slope of each line.

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



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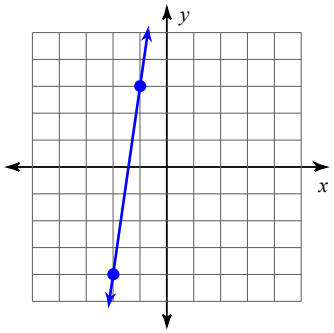
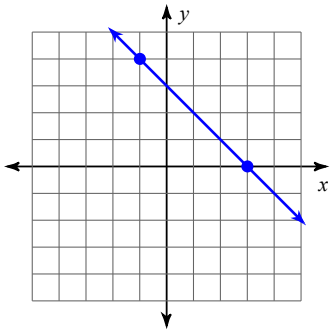


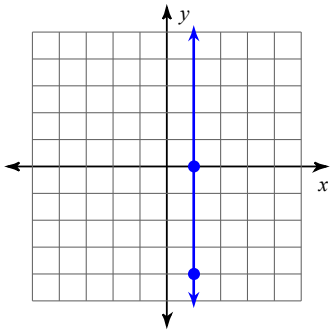
7

3)



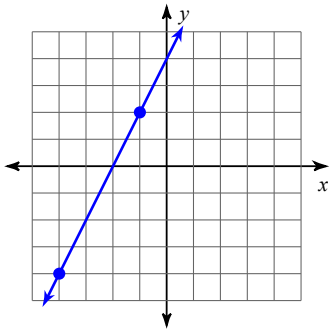
−1

4)



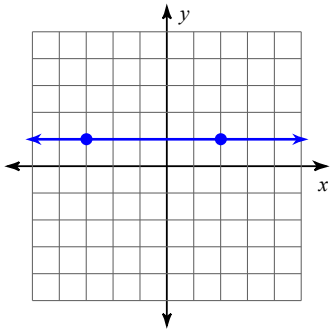
Undefined

5)



2

6)



0

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

$-\frac{1}{3}$

8) $y = 2x - 2$

2

9) $x = -1$

Undefined

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

$y = -3x - 1$

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

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

15) Slope = –1, y-intercept = 3

$y = -x + 3$

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

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

17) Slope = 3, y-intercept = 0

$y = 3x$

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 $(3, \_\_)$

Anything but 10

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

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