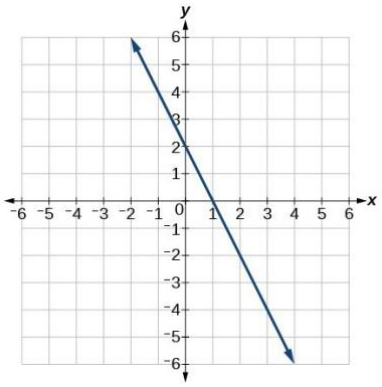
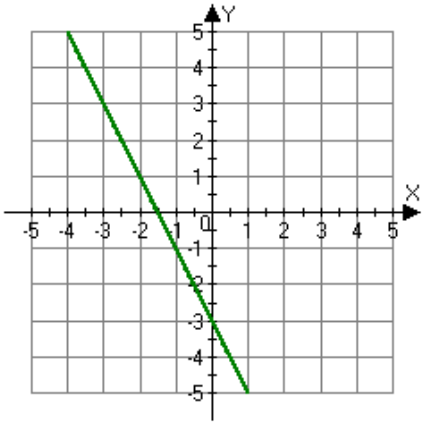
See ANSWERS below on PAGE 2.

Find the equation of the line for each of the graphs.

1) 

2) 

Graph each of the equations below on a coordinate plane.

3) $y = -3x - 5$

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

5) $y = -x$

6) $3x + y = -6$

7) $x - 2y = 8$

Find the equation of the line going through the two points given.

8) (-3,-4) and (7, -14)

9) (0,-8) and (-2, 4)

Answers:

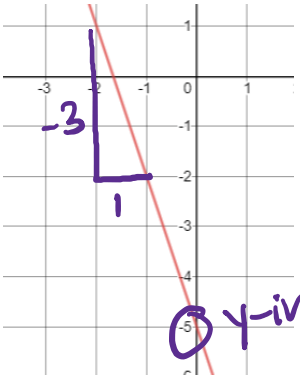
1. y = -2x + 2

y-int = 2
slope = -2
y = mx + b
y = -2x + 2

2. y = -2x – 3

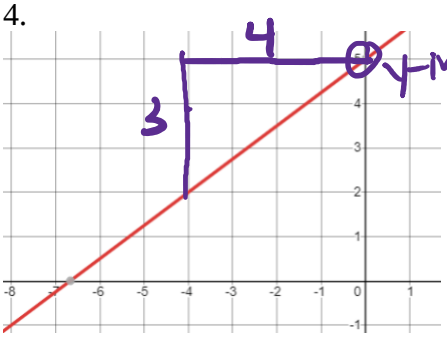
y-int = -3
Slope = -2
y = mx + b
y = -2x - 3

3.



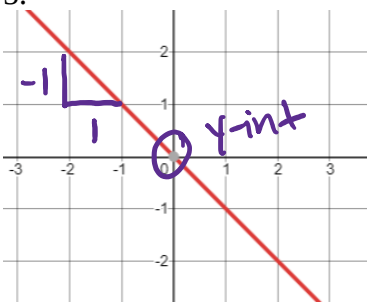
y = -3x - 5
y-int = -5
slope = -3

4.



$y = \frac{3}{4}x + 5$
y-int = 5
slope = 3/4

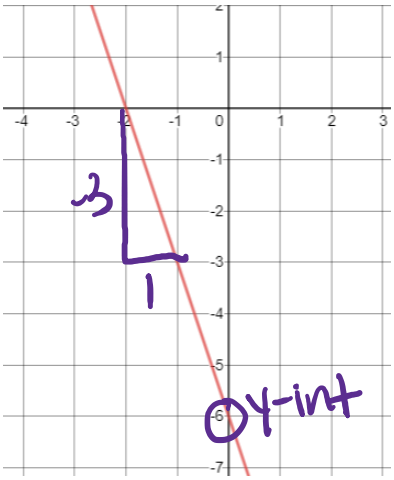
5.



y = -x
y-int = 0
slope = -1

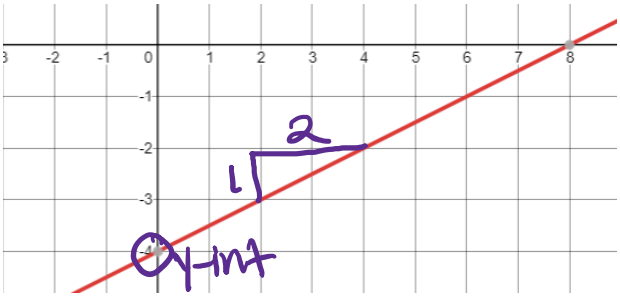
6.

3x + y = -6
-3x -3x
y = -3x - 6



y-int = -6
slope = -3

7.



$x - 2y = 8$
$-x \quad -x$
$\frac{-2y}{-2} = \frac{-x+8}{-2}$
$y = \frac{1}{2}x - 4$

y-int = -4
slope = 1/2

8. y = -x – 7 (-3, -4) (7, -14)

$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-14 - -4}{7 - -3} = \frac{-10}{10} = -1$

point slope $y = m(x - x_1) + y_1 \Rightarrow y = -(x - -3) - 4$

$\boxed{y = -(x+3) - 4}$ OR $\boxed{y = -x - 7}$

9. y = -6x – 8

(0, -8) (-2, 4)

$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - -8}{-2 - 0} = \frac{12}{-2} = -6$

(0, -8) = y-int

$\boxed{y = -6x - 8}$