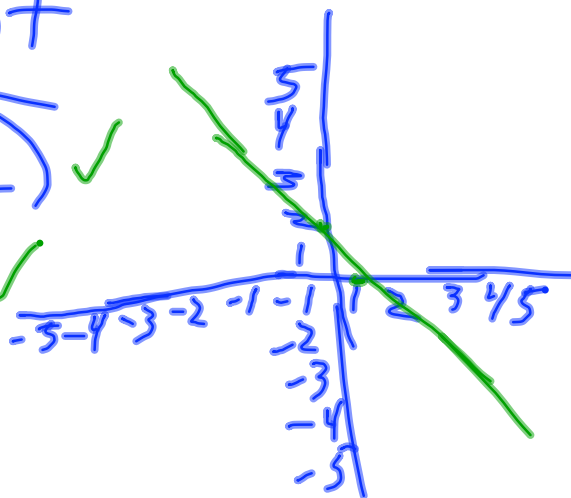


Graph $y = -2(1) + 2 = -2 + 2 = 0$
 $y = -2x + 2$
 $m = -2$ $b = 2$

x	y	Point
0	2	(0, 2) ✓
1	0	(1, 0) ✓



Graph

$$y + 4 = -\frac{3}{2}(x + 2)$$

$$y - y_1 = m(x - x_1)$$

point slope:

Point $(-2, -4)$ $m = -\frac{3}{2}$

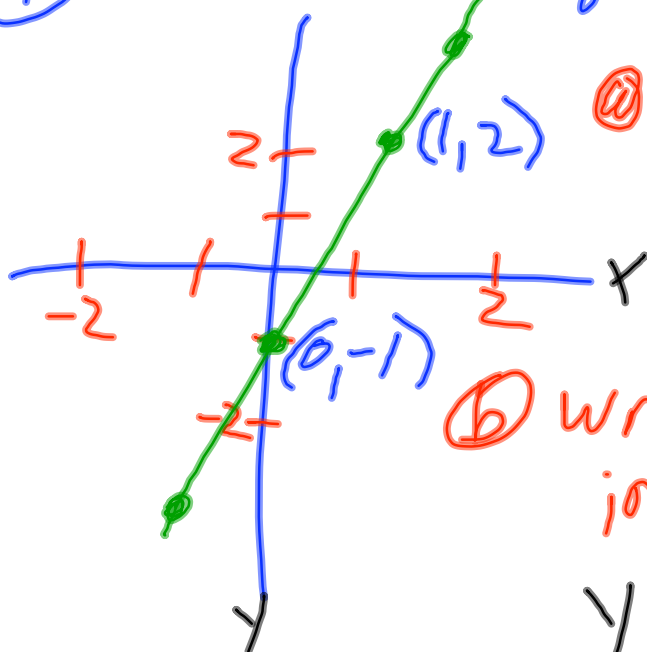


Find slope

$$\textcircled{3} \begin{matrix} (2, 2) \\ x_1, y_1 \end{matrix} \begin{matrix} (3, 1) \\ x_2, y_2 \end{matrix}$$

$$m = \frac{1 - 2}{3 - 2} = \frac{-1}{1} = -1$$

⑦ Find slope:



① $m = \frac{2 - (-1)}{1 - 0} = \frac{3}{1}$

② write in slope intercept form:

$$y = mx + b$$

$$y = 3x - 1$$

Write the equation of the line in point slope form:

$$y - y_1 = m(x - x_1)$$

$$y - 2 = 3(x - 1)$$

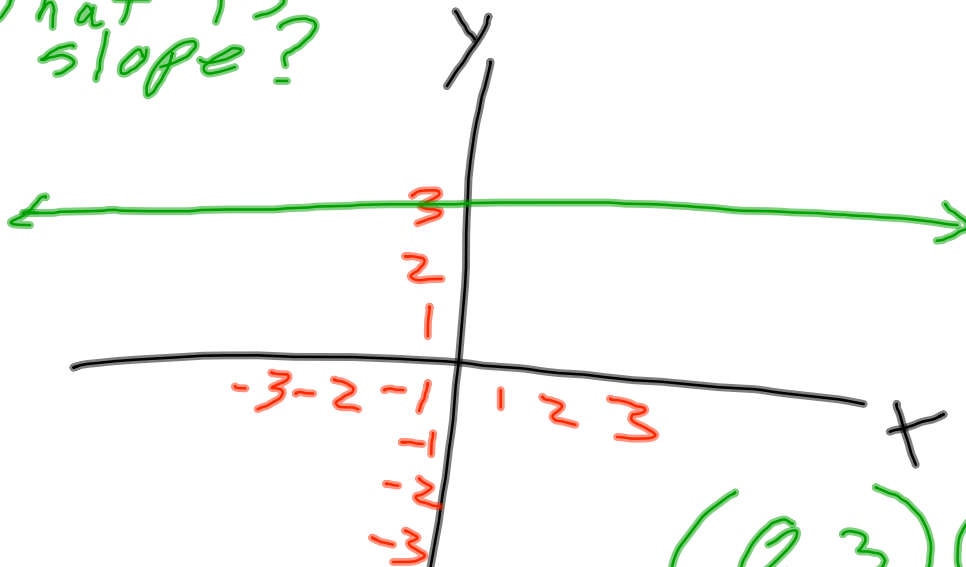
used
(1, 2)

$$y - -1 = 3(x - 0)$$

$$y + 1 = 3(x - 0)$$

used
(0, -1)

What is slope?



$$\frac{3-3}{2-0}$$

$\frac{0}{2}$

$$\left(x_1, y_1\right) \left(x_2, y_2\right)$$

$(0, 3) \quad (2, 3)$
 $(x_1, y_1) \quad (x_2, y_2)$

what is slope and
y-intercept?

① $y = 3x - 4$
 $m = 3$ $b = -4$

② $y + 6x = 2$
 $\frac{-6x}{-6x} \quad \frac{-6x}{-6x}$
 $y = -6x + 2$ $m = -6$ $b = 2$

Write in point slope
form: $y - y_1 = m(x - x_1)$

$$(4, -6) \quad (2, -3)$$

$$m = \frac{-3 - (-6)}{2 - 4} = \frac{-3}{2}$$

$$y + 6 = \frac{-3}{2}(x - 4)$$

$$y + 6 = \frac{-3}{2}(x - 4)$$

Rate of change

miles | hours

7	21	3
7	28	4
	35	5

7 miles in 1 hour

$$(1, 2) (-1, -4)$$

$$m = \frac{-4 - 2}{-1 - 1} = \frac{-6}{-2} = 3$$

$$y = 3x - 1$$