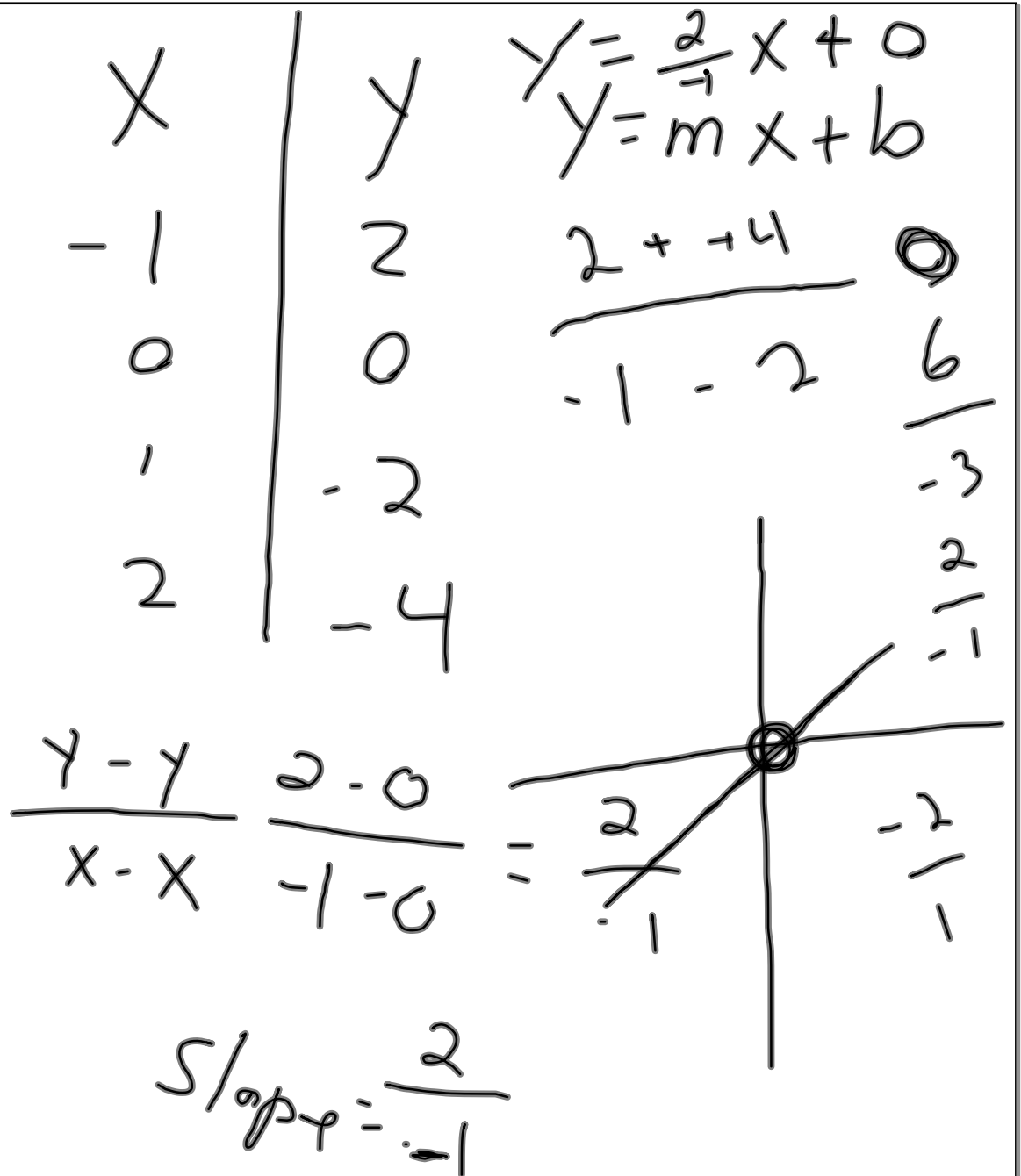


$$\text{Slope} = \frac{\text{rise}}{\text{run}}$$

$$\text{Slope} = \frac{\text{change in } y}{\text{change in } x}$$

$$\text{Slope} = \frac{\Delta y}{\Delta x}$$

$$\text{Slope} = \frac{y - y}{x - x}$$



X	Y	$y = mx + b$
-2	-3	
0	-2	$\frac{y - y_1}{x - x_1}$
2	-1	
4	0	

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

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

x	y
1	-1
2	1
3	3
4	5

$y = 2x - 3$

$1 = 2(2) + b$
 $1 = 4 + b$
 $\frac{y - y}{x - x} = \frac{-3}{2 - 2}$

$y - y = -3 = b$
 $x - x$
 $\frac{-1 - 1}{1 - 2} = \frac{-2}{-1}$

$y = mx + b$

$1 = 2(2) + b$
 $1 = 4 + b$
 $-3 = b$

$y = 2x + b$
 $y = 2x - 3$

$$\begin{array}{c|c} x & y \\ \hline -2 & 5 \\ -1 & 4 \end{array} \quad \frac{5-4}{-2-(-1)} = \frac{1}{-1}$$

$$y = -1x + b$$

$$5 = -1(-2) + b$$

$$5 = 2 + b$$

$$3 = b$$

$$y = -1x + 3$$

Homework

x	y		x	y		x	y		x	y
4	-2		-2	3		-4	7		-2	2
5	0		-1	2		-2	4		1	3
6	2		0	1		0	1		4	4
7	4		1	0		2	-2		7	5