

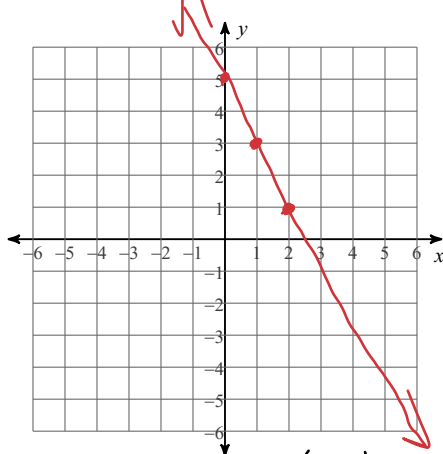
HW 7.2: Graphing Linear Relationships Homework

Due Date _____

5K _____

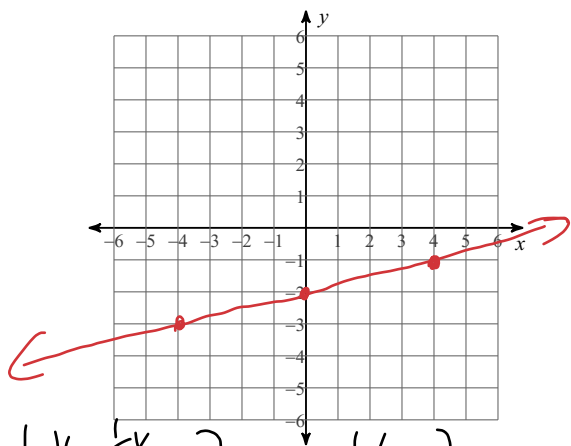
Graph each line by using the algorithm taught in class.

1) $y = -2x + 5$



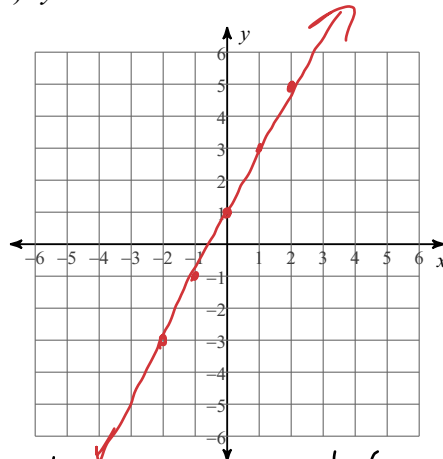
x	$y = -2x + 5$	(x, y)
2	$-2(2) + 5 = 1$	(2, 1)
1	$-2(1) + 5 = 3$	(1, 3)
0	$-2(0) + 5 = 5$	(0, 5)
-1	$-2(-1) + 5 = 7$	(-1, 7)
-2	$-2(-2) + 5 = 9$	(-2, 9)

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



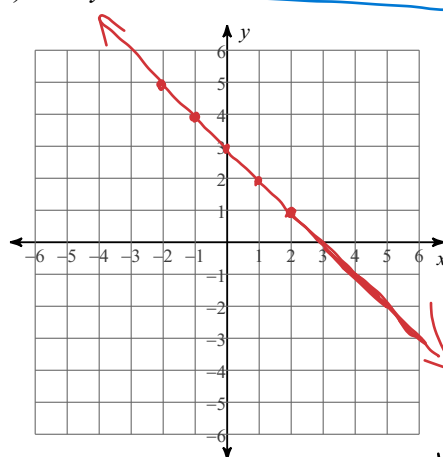
x	$y = \frac{1}{4}x - 2$	(x, y)
8	$\frac{1}{4}(8) - 2 = 0$	(8, 0)
4	$\frac{1}{4}(4) - 2 = -1$	(4, -1)
0	$\frac{1}{4}(0) - 2 = -2$	(0, -2)
-4	$\frac{1}{4}(-4) - 2 = -3$	(-4, -3)
-8	$\frac{1}{4}(-8) - 2 = -4$	(-8, -4)

2) $y = 2x + 1$



x	$y = 2x + 1$	(x, y)
2	$2(2) + 1 = 5$	(2, 5)
1	$2(1) + 1 = 3$	(1, 3)
0	$2(0) + 1 = 1$	(0, 1)
-1	$2(-1) + 1 = -1$	(-1, -1)
-2	$2(-2) + 1 = -3$	(-2, -3)

4) $x + y = 3$

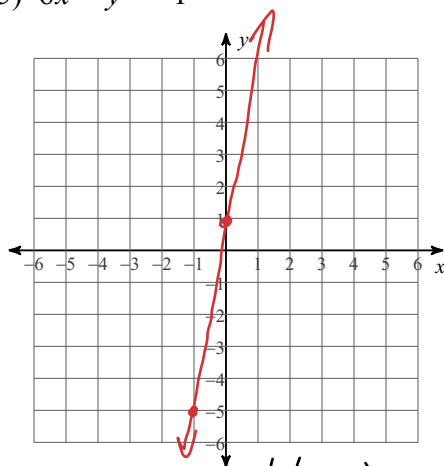


$$x + y = 3$$

$$y = -x + 3$$

x	$y = -x + 3$	(x, y)
2	$-(2) + 3 = 1$	(2, 1)
1	$-(1) + 3 = 2$	(1, 2)
0	$-(0) + 3 = 3$	(0, 3)
-1	$-(-1) + 3 = 4$	(-1, 4)
-2	$-(-2) + 3 = 5$	(-2, 5)

5) $6x - y = -1$

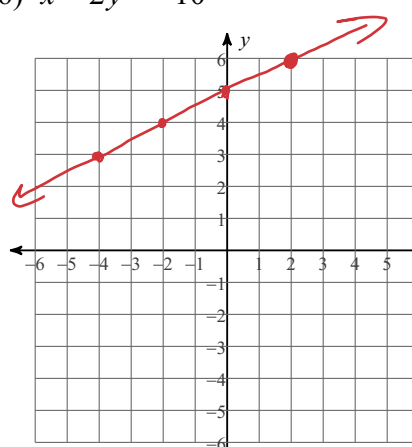


$$6x - y = -1$$

$$6x + 1 = y$$

x	y = 6x + 1	(x, y)
2	6(2) + 1 = 13	(2, 13)
1	6(1) + 1 = 7	(1, 7)
0	6(0) + 1 = 1	(0, 1)
-1	6(-1) + 1 = -5	(-1, -5)
-2	6(-2) + 1 = -11	(-2, -11)

6) $x - 2y = -10$



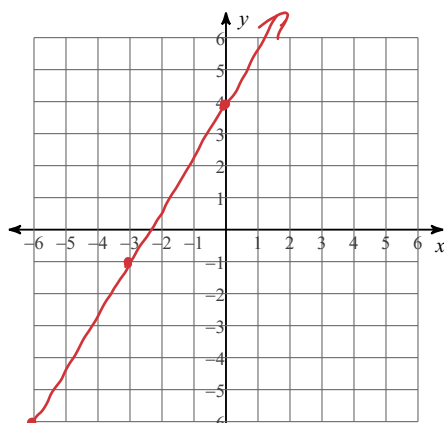
$$x - 2y = -10$$

$$\frac{1}{2}x + \frac{10}{2} = \frac{2}{2}y$$

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

x	y = $\frac{1}{2}x + 5$	(x, y)
4	$\frac{1}{2}(4) + 5 = 7$	(4, 7)
2	$\frac{1}{2}(2) + 5 = 6$	(2, 6)
0	$\frac{1}{2}(0) + 5 = 5$	(0, 5)
-2	$\frac{1}{2}(-2) + 5 = 4$	(-2, 4)
-4	$\frac{1}{2}(-4) + 5 = 3$	(-4, 3)

7) $-3y = -12 - 5x$



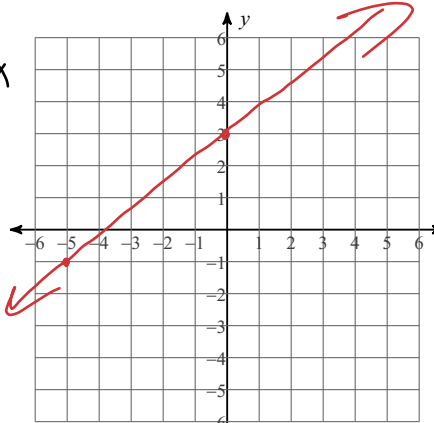
$$-3y = -12 - 5x$$

$$\frac{5x + 12}{3} = \frac{3y}{3}$$

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

x	y = $\frac{5}{3}x + 4$	(x, y)
6	$\frac{5}{3}(6) + 4 = 14$	(6, 14)
3	$\frac{5}{3}(3) + 4 = 9$	(3, 9)
0	$\frac{5}{3}(0) + 4 = 4$	(0, 4)
-3	$\frac{5}{3}(-3) + 4 = -1$	(-3, -1)
-6	$\frac{5}{3}(-6) + 4 = -6$	(-6, -6)

8) $4x - 5y = -15$



$$4x - 5y = -15$$

$$\frac{4x + 15}{5} = \frac{5y}{5}$$

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

x	y = $\frac{4}{5}x + 3$	(x, y)
10	$\frac{4}{5}(10) + 3 = 11$	(10, 11)
5	$\frac{4}{5}(5) + 3 = 7$	(5, 7)
0	$\frac{4}{5}(0) + 3 = 3$	(0, 3)
-5	$\frac{4}{5}(-5) + 3 = -1$	(-5, -1)
-10	$\frac{4}{5}(-10) + 3 = -5$	(-10, -5)