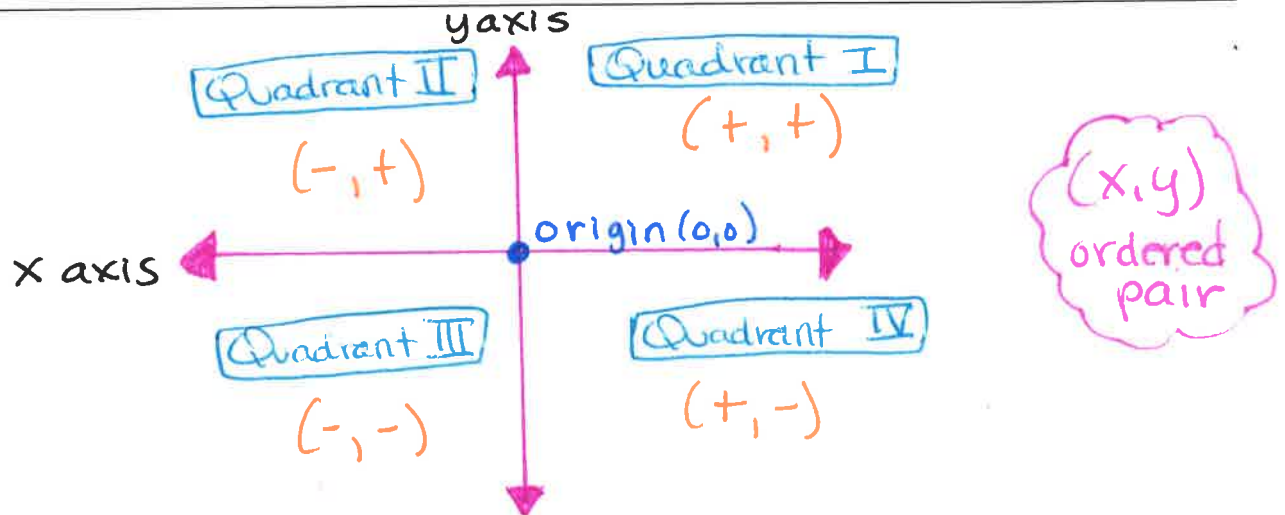


The Coordinate Plane



Plotting Points in Coordinate Plane

Plot the point in a coordinate plane. Describe the location.

a. A $(4, 1)$

Quadrant I

b. B $(0, 3)$

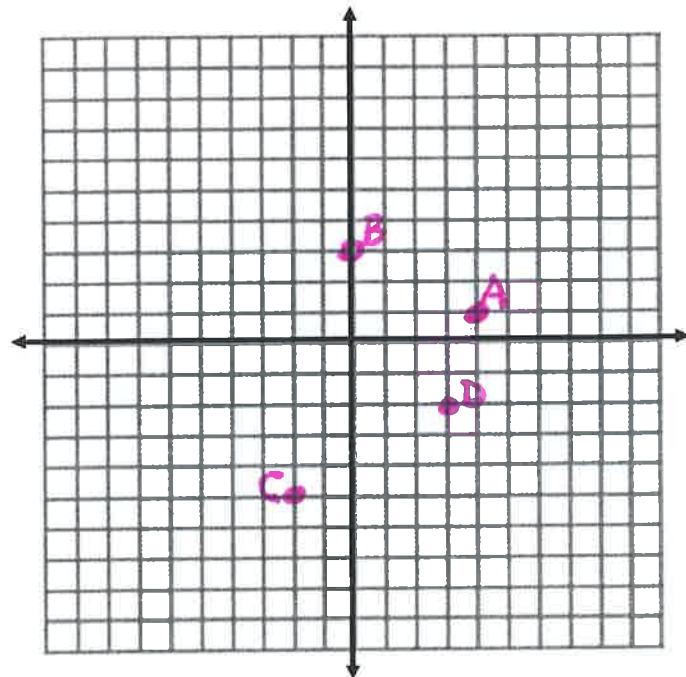
y axis

c. C $(-2, -5)$

Quadrant III

d. D $(3, -2)$

Quadrant IV



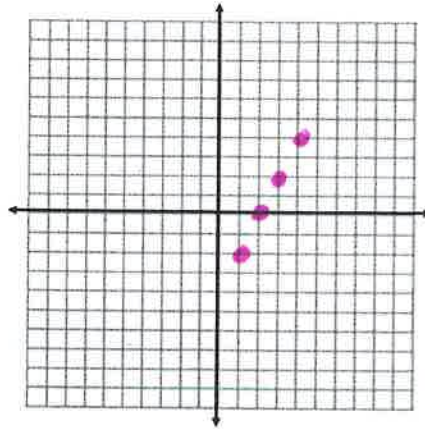
Direct Variation and Graphing

* Must cross origin
* must be straight line

1.

x	y
1	-2
2	0
3	2
4	4

Handwritten notes: $+1$ (between rows 1-2), $+1$ (between rows 2-3), $+1$ (between rows 3-4). $+2$ (next to y-values 0, 2, 4).

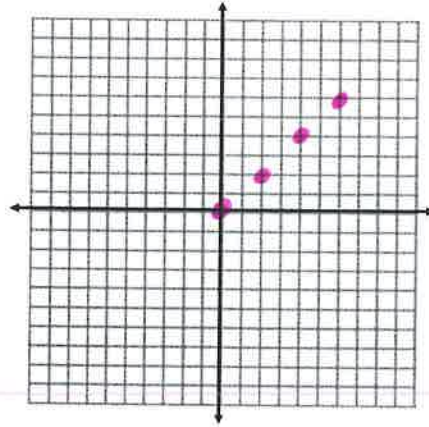


NO - does not go through (0,0)

2.

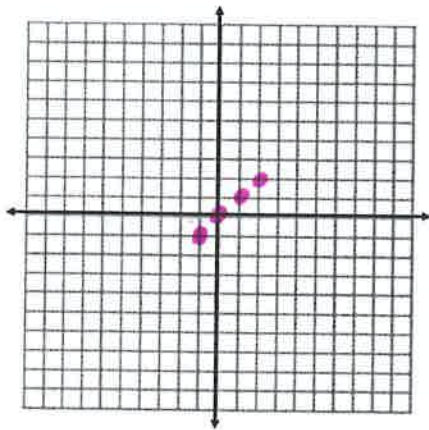
x	y
0	0
2	2
4	4
6	6

Handwritten notes: $+2$ (between rows 1-2), $+2$ (between rows 2-3), $+2$ (between rows 3-4).



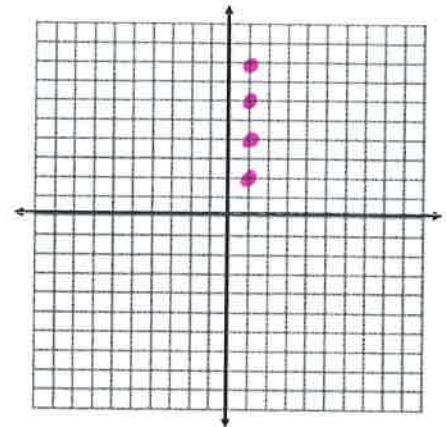
yes

3. $(-1, -1), (0, 0), (1, 1), (2, 2)$



yes

4. $(1, 2), (1, 4), (1, 6), (1, 8)$



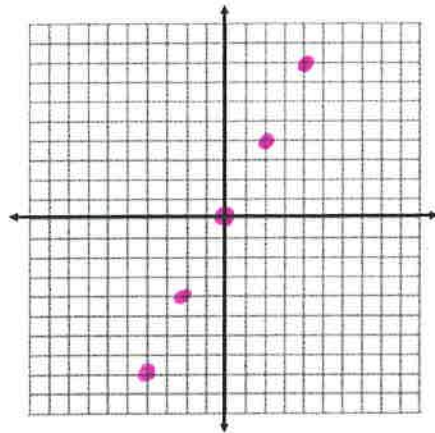
NO

Graphing Solutions

The variable x and y vary directly. Use the variable to write an equation and graph the solutions.

1. $y = 4; x = 2$

x	y
-4	-8
-2	-4
0	0
2	4
4	8



$$y = kx$$

$$4 = k(2)$$

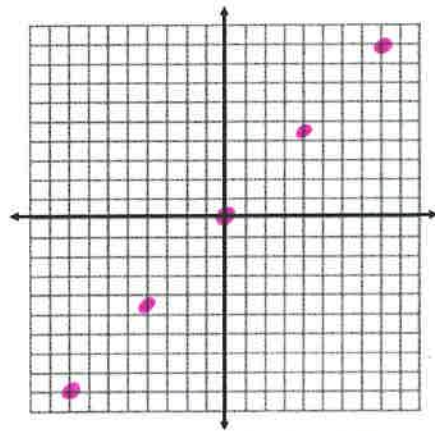
$$2 = k$$

$$y = 2x$$

2. $y = 45; x = 40$

Choose multiples of 8

x	y
-16	-18
-8	-9
0	0
8	9
16	18



Count by 2's

$$y = kx$$

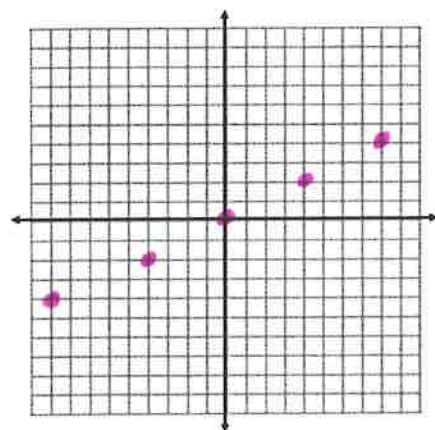
$$45 = k(40)$$

$$\frac{9}{8} = k$$

$$y = \frac{9}{8}x$$

3. $y = 2; x = 4$

x	y
-8	-4
-4	-2
0	0
4	2
8	4



$$y = kx$$

$$2 = k(4)$$

$$\frac{1}{2} = k$$

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

