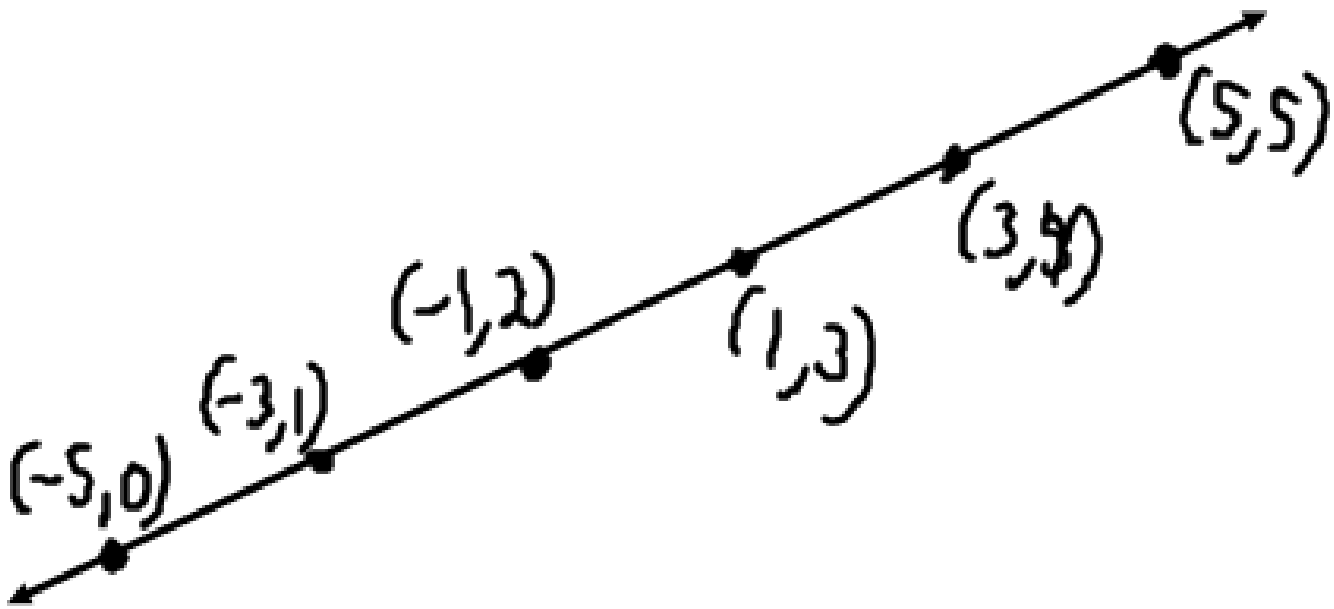
Section 13-2: Creating Graphs from Tables

See Worksheet 13-2

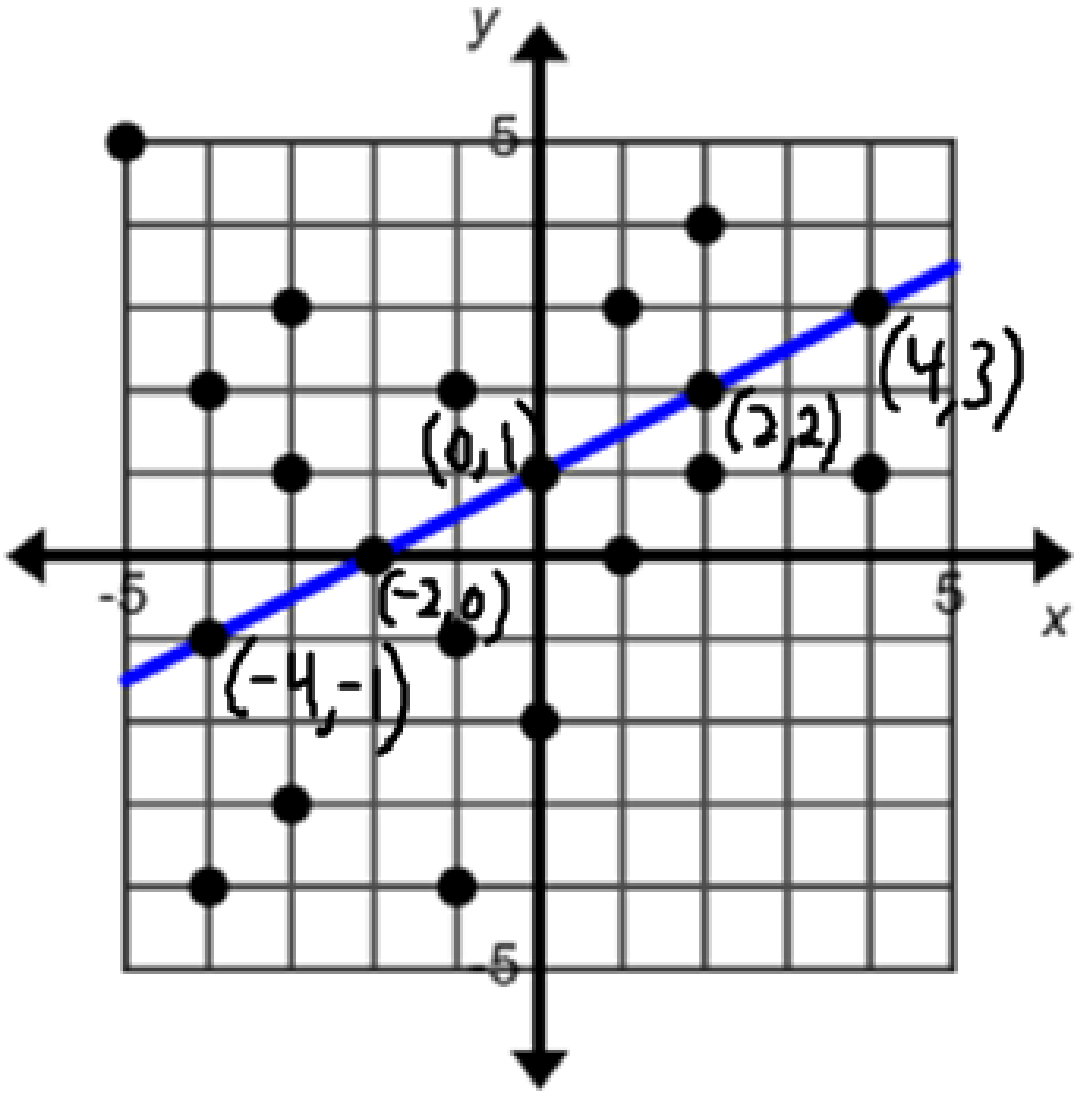


Solutions of a graph:

Any point (x, y) on the line.

Name all of the whole number solutions shown on the coordinate graph below.

1.



(-4, -1)

(2, 2)

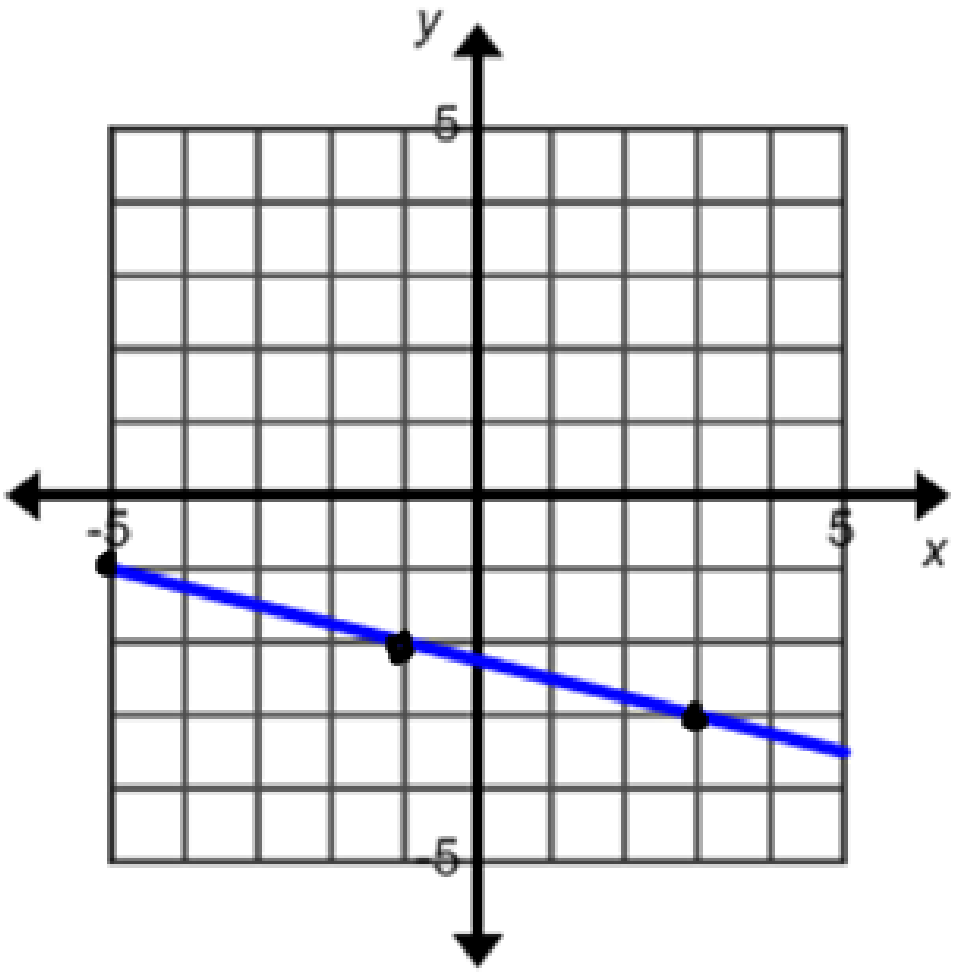
(0, 1)

(4, 3)

(-2, 0)

Name THREE solutions for the given line.

3.



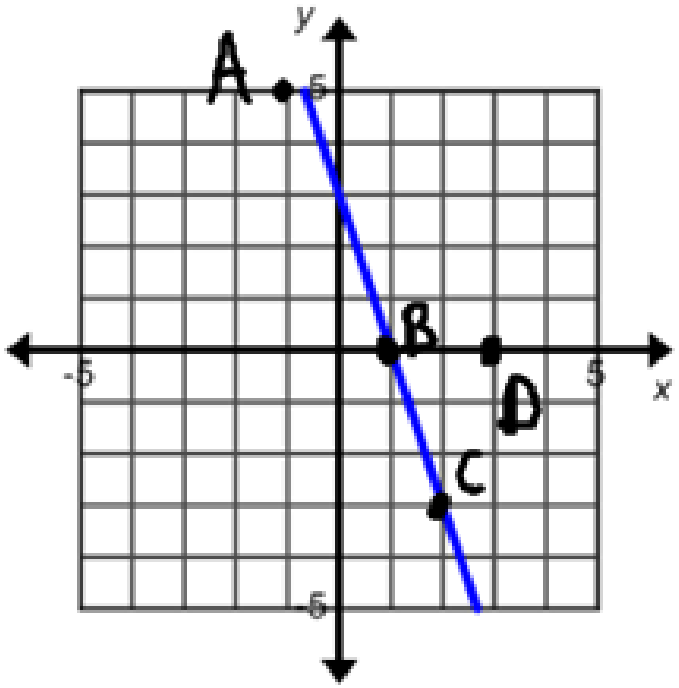
(-1, -2)

(-5, -1)

(3, -3)

Determine if each point is a solution for the given line, write YES (if it is a solution) or NO (if it is not).

5.



A. (–1, 5) No

B. (1, 0) Yes

C. (2, –3) Yes

D. (3, 0) No

Determine if each point is a solution to the equation, write YES (if it is a solution) or NO (if it is not).

7. $y = x + 5$

x y

No A. $(2, 5)$

No B. $(5, 2)$

Yes C. $(3, 8)$

Yes D. $(-1, 4)$

$y = x + 5$

A. $5 = 2 + 5$ No

B. $2 = 5 + 5$ No

C. $8 = 3 + 5$ Yes

D. $4 = -1 + 5$ Yes

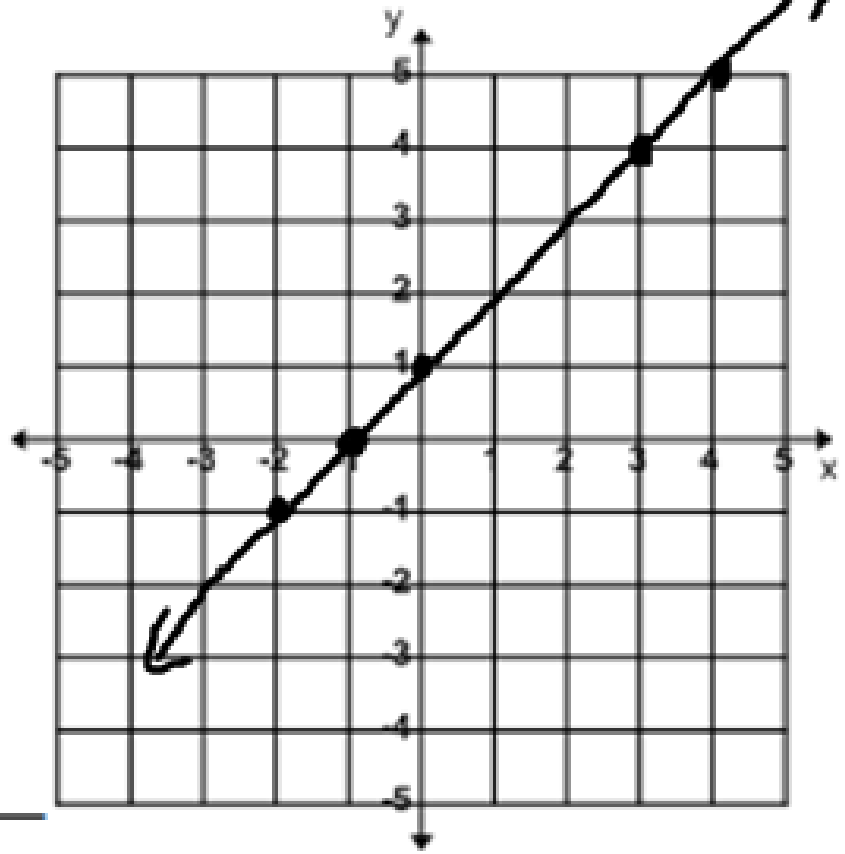
Solutions of an equation:

Plug (x,y) into the x and y in the equation.

Create the following tables and graph each equation:

5. $y = x + 1$

X	Y
-2	-1
0	1
-1	0
3	4
4	5



$y = -2 + 1$

$y = -1$

$y = 0 + 1 = 1$

$y = -1 + 1 = 0$

$y = 3 + 1 = 4$

$y = 4 + 1 = 5$

Slope = 1

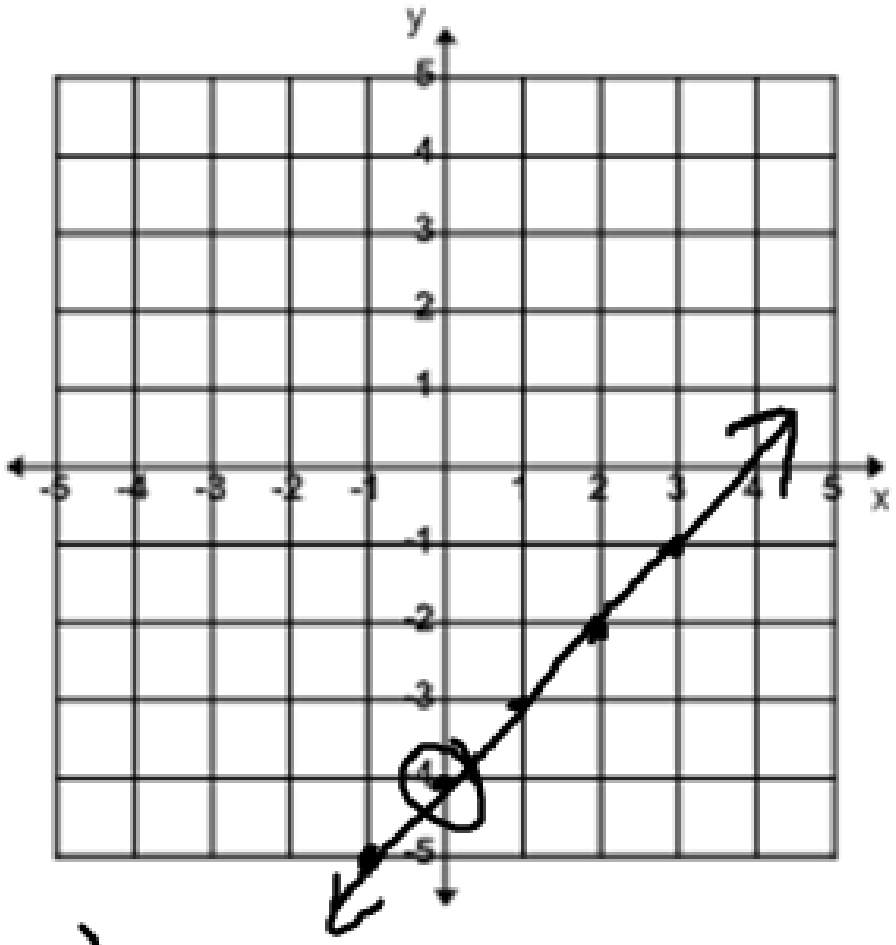
Y-intercept = (0,1)

The Y-Intercept: where the line crosses the y-axis.

when $x = 0$

6. $y = x - 4$

X	Y
-1	-5
0	-4
1	-3
2	-2
3	-1



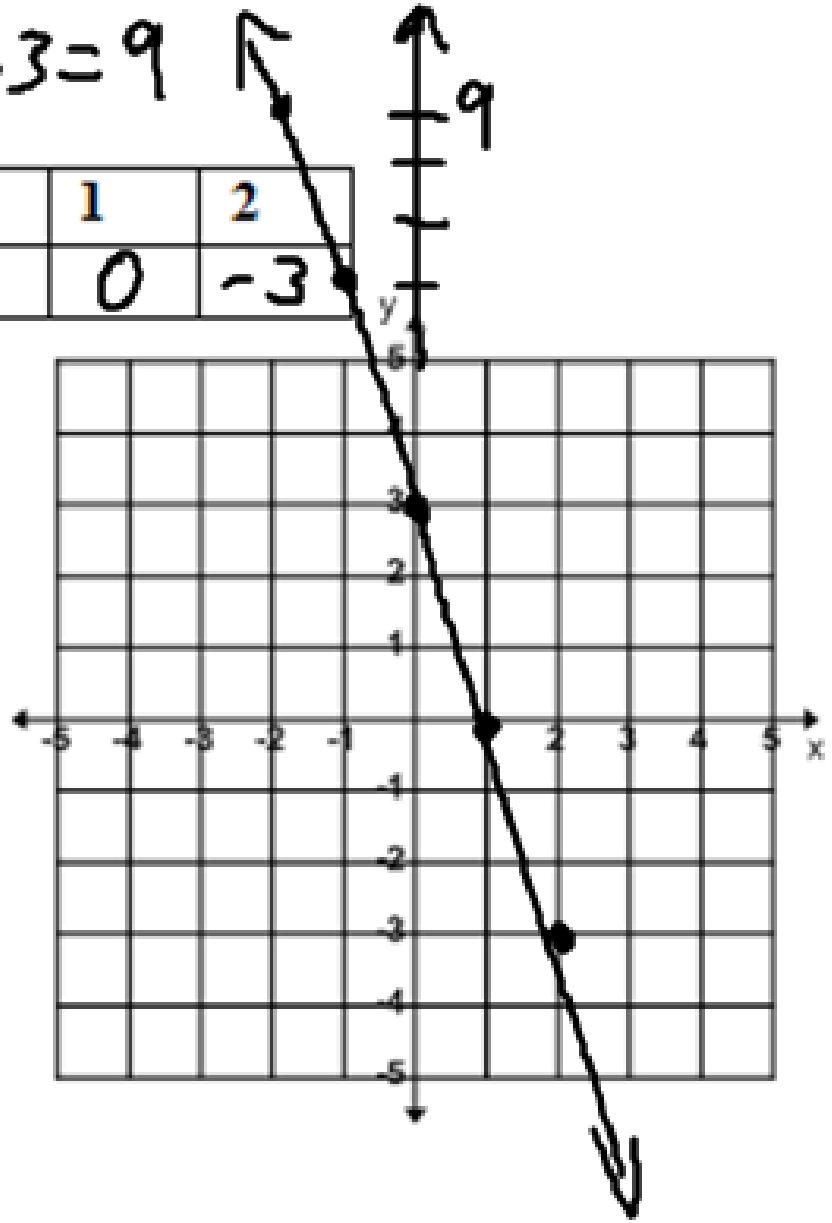
Slope = 1

Y-intercept = (0, -4)

8. $y = -3x + 3$

$y = -3(-2) + 3 = 6 + 3 = 9$

X	-2	-1	0	1	2
Y	9	6	3	0	-3



Slope = $\frac{-3}{1} = -3$

Y-intercept = (0,3)