

Name:

Date: / /

Lesson: Graphing Lines (Table Method)

Period:

Warm up:

Find the value of y by inputting the given value of x.

a.  $y = x + 7$  ;  $x = -4$

b.  $y = x - 5$  ;  $x = 5$

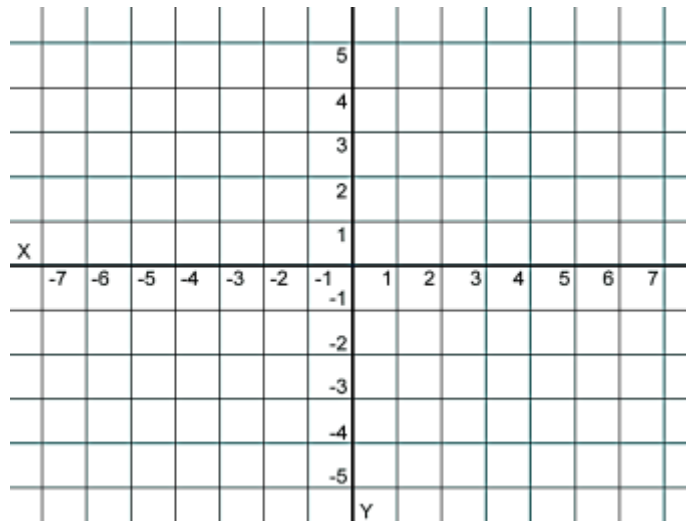
c.  $y = 2x - 3$  ;  $x = -2$

d.  $y = \frac{3}{2}x - 1$  ;  $x = 8$

Warm up:

Plot each of the given points (ordered pairs) on the axis provided. Then answer the questions.

Ordered Pair
(3,5)
(-2,-7)
(-4,-4)
(-4,2)
(0,0)
(-2,0)
(8,-4)
(-3,-7)
(5,5)



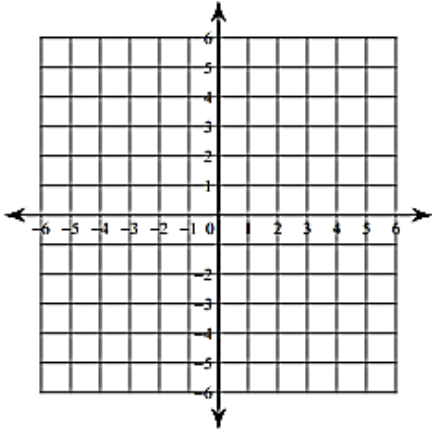
1. With a ruler will connecting any two points give you a straight line?
2. Can any three points be connected to make a straight line?
3. Find a set of three points that line in a perfectly straight line and give reason for your answer.

# Representing Linear Relationships Using Graphs

A **linear equation** is an equation whose solutions are ordered pairs that form a line when graphed on a coordinate plane. Linear equations can be written in the form  $y = mx + b$ . When  $b \neq 0$ , the relationship between  $x$  and  $y$  is *nonproportional*.

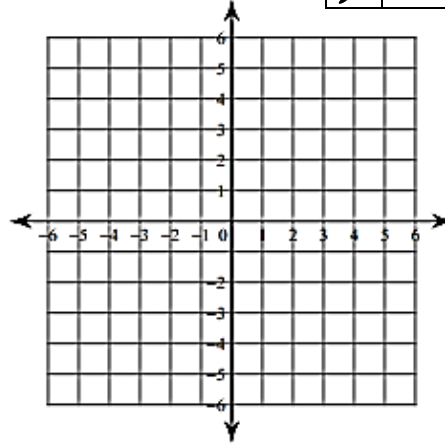
**Example 1:**  $y = 3x$

$x$	-1	0	1	2
$y$				



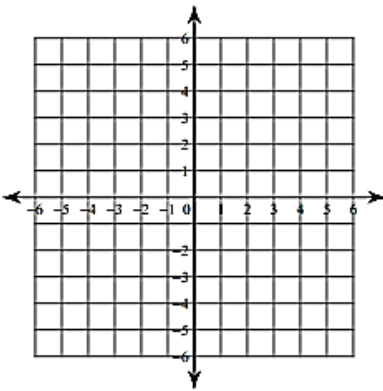
**Example 2:**  $y = 2x - 1$

$x$	-2	-1	2	3
$y$				



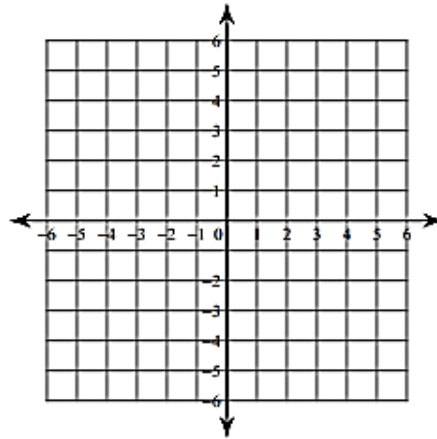
**Example 3:**  $y = -3x + 4$

$x$	0	1	2	3
$y$				



**Example 4:**  $y = \frac{1}{2}x - 5$

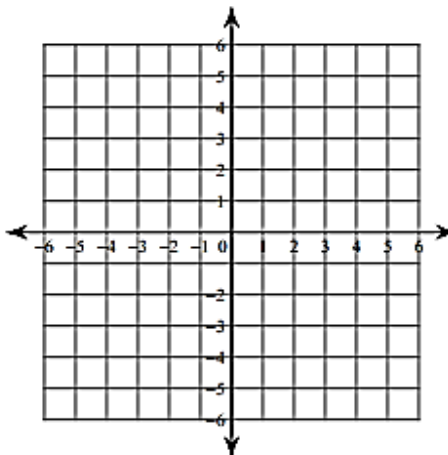
$x$	-2	0	2	4
$y$				



**Example 5:**  $y = x - 2$

*Make your own table of values for this question.*

$x$			
$y$			



**Example 6:**  $y = -\frac{2}{3}x + 4$

$x$			
$y$			

*Make your own table of values for this question.*

