#59

Name _____ Date _____

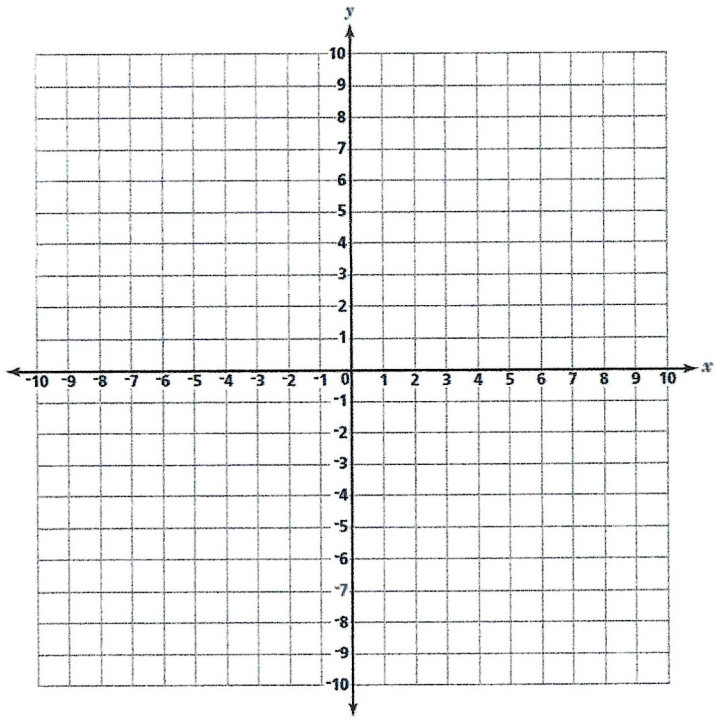
8A; Algebra 1 Period _____

How do we graph a linear equation using a table

I. Graph the linear equation y = 3x - 2 by setting up a table of values using your graphing calculator.

x	y	(x,y)
-3		
-2		
-1		
0		
1		
2		
3		

**The Domain (x-value) is always $\{-3 \le x \le 3\}$ unless stated otherwise



Steps to graph:

1) Plot the points
2) Connect the points
3) Extend the lines through the graph
4) Draw arrows on the ends of the lines
5) Write the equation on the line

Calculator steps:

*To get the table: [y=] 3x - 2 [2nd] [Graph]

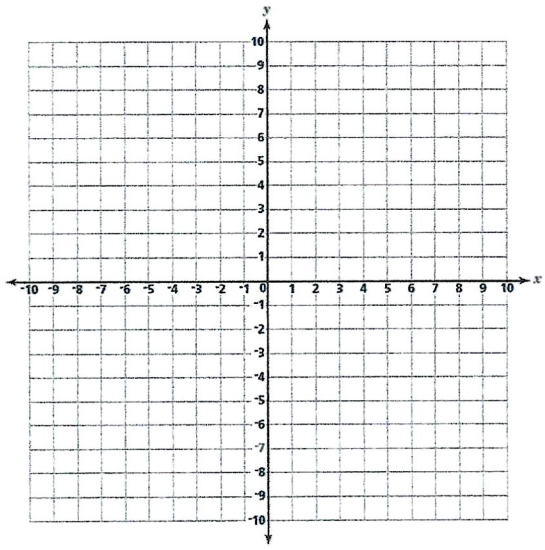
*Press [Graph] to see a picture of the graph

*[Zoom] [6:Standard] to see all 4 Quadrants

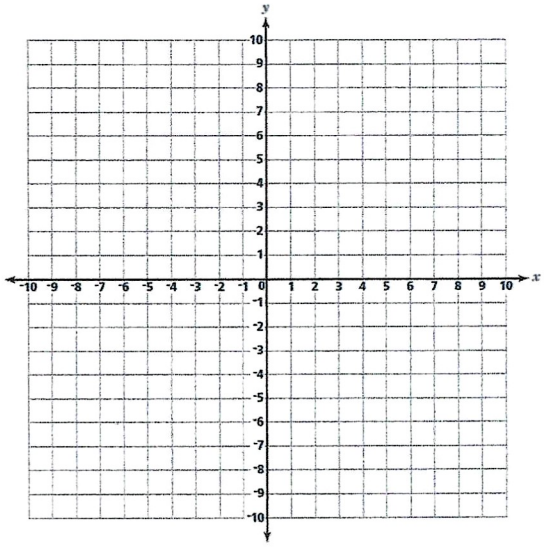
* To clear the calculator: [2nd] [+] [7] [1] [2]

II. Practice Examples:

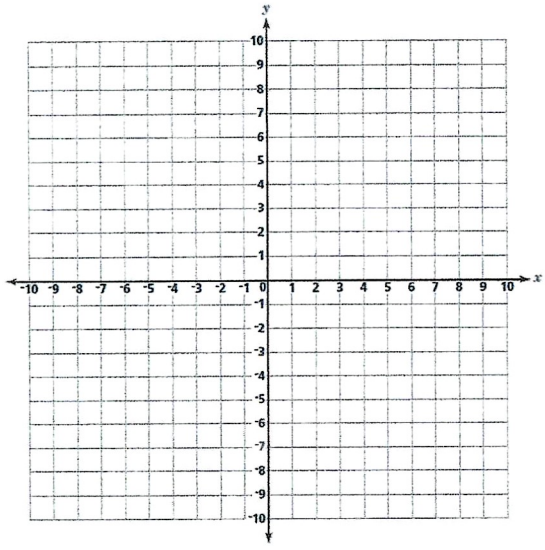
1) Create a table of values to graph the linear equation y = 2x + 3



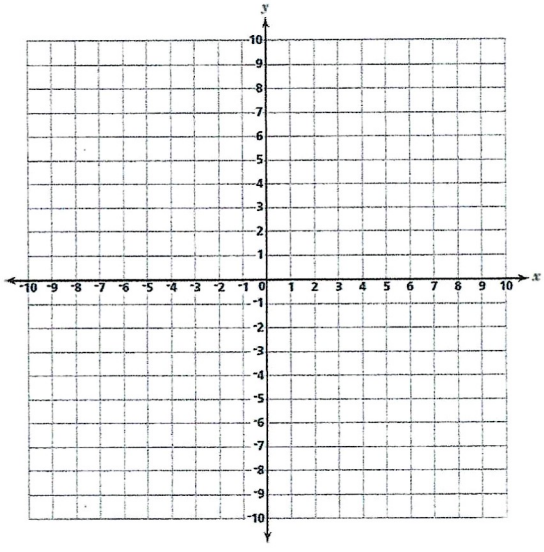
2) Create a table of values to graph the linear equation y = -x + 3



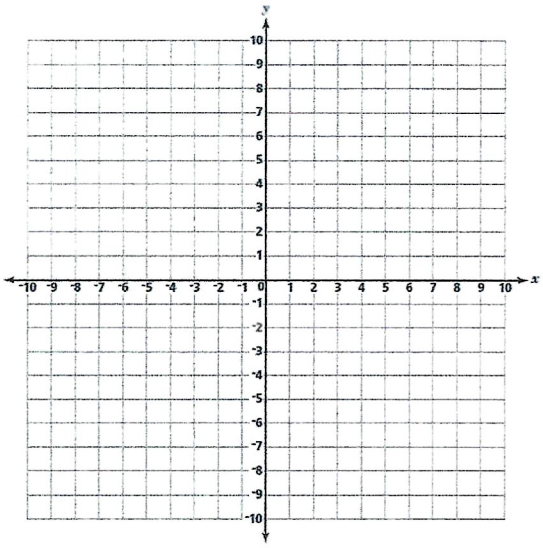
3) Create a table of values to graph the linear equation y = 3x + 4



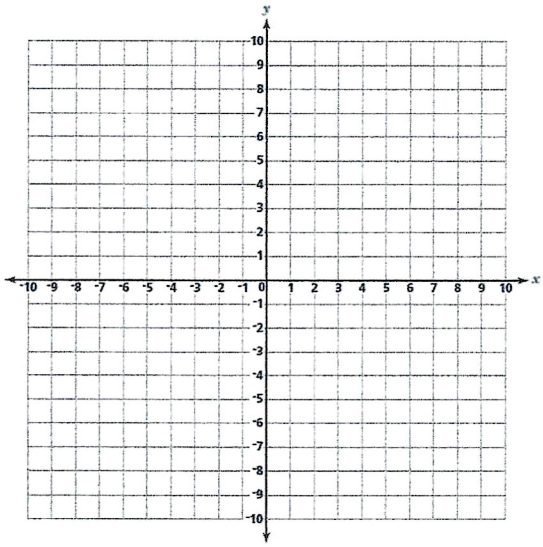
4) Create a table of values to graph the linear equation y = $\frac{1}{2}x - 4$



5) Create a table of values to graph the linear equation $y = x + 2$



6) Create a table of values to graph the linear equation $y = -3x - 5$



7) Is (-3,31) a solution of the equation $y = -7x + 10$

8) Is (7,59) a solution of the equation $y = -7x + 10$

9) Use the equation $y = 2x - 4$ to solve for the y-value in (-3, y)

10) Use the equation $y = 2x - 4$ to solve for the y-value on (50, y)