Lesson #2: Graphing Linear Relationships   Date: _____

Learning Goal: We are learning to create a table of values from a linear equation and use that table to create a list of ordered pairs that can be plotted on a coordinate grid.

Once again, we will begin with some new vocabulary:

Independent Variable

Dependent Variable

Linear Relationship

Table of Values

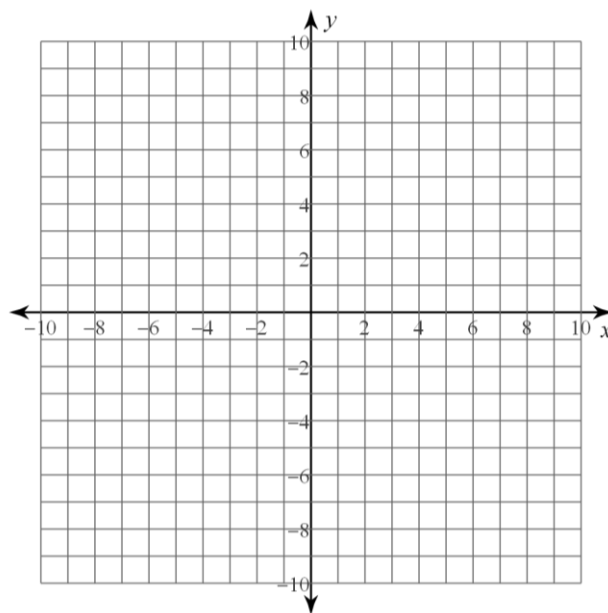The goal for today's lesson is to graph a linear relationship using this algorithm:

> **1. Rearrange the equation so it is dependent variable = everything else (or y=_____)**
> **2. Create a Table of Values and choose an appropriate set of x-coordinates.**
> **3. Use that set and calculate the corresponding y-coordinates.**
> **4. Create the point (x,y).**
> **5. Plot the points.**
> **6. Draw a line through the points (do not just connect them).**

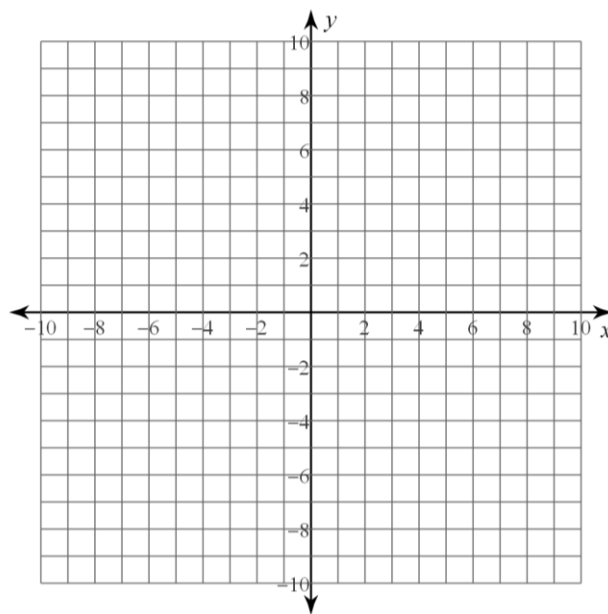Your table of values should look like this:

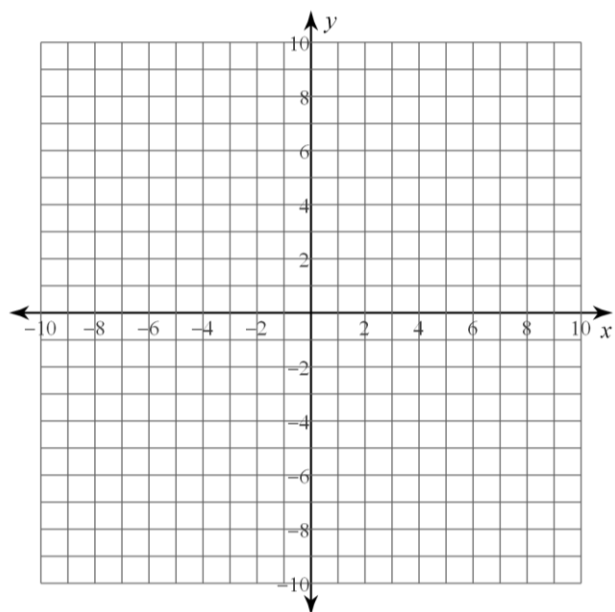| x	y	(x,y)
Set of x-coordinates	Corresponding y-coordinates	Set of points to plot

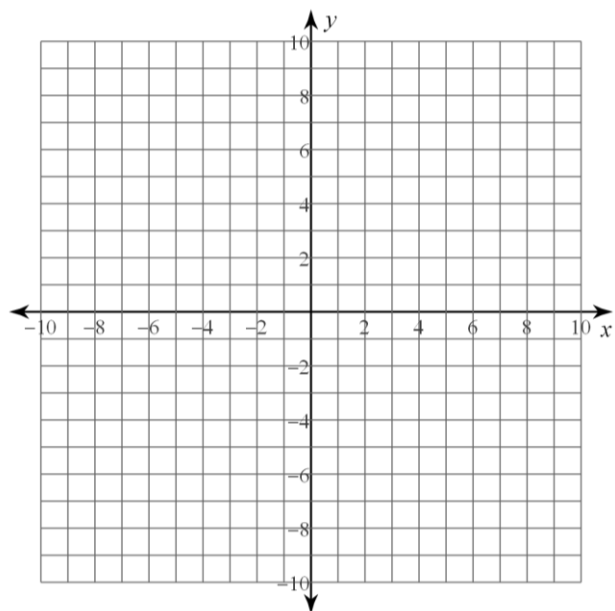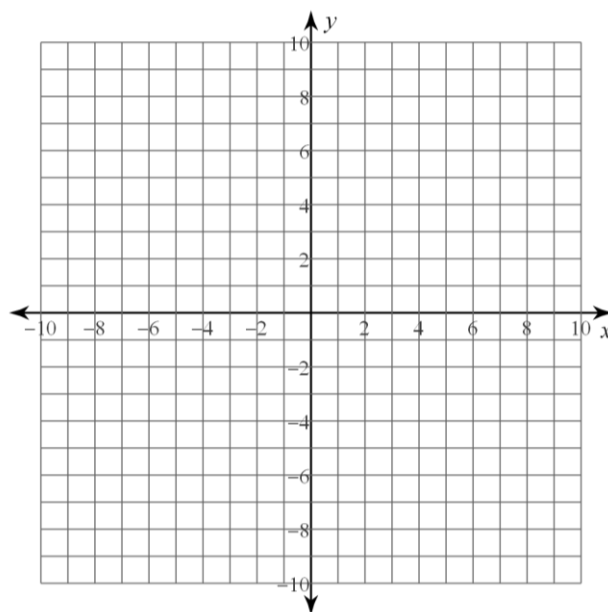Examples:

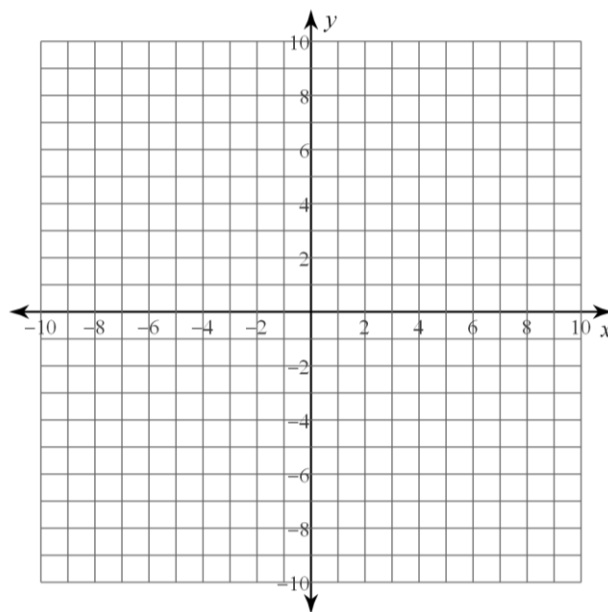1. $y = x - 3$

2. $x + y = 5$

3. $2x - y = 1$

4. $6x + 2y - 10 = 0$

5. $y = \dfrac{1}{2}x - 4$

6. $3x - 4y = 12$

Success Criteria:
- I can rearrange a linear equation so that the "dependent variable = everything else"
- I can create a table of values and choose an appropriate set of x coordinates.
- I can use those x-coordinates to generate a set of y-coordinates
- I can create ordered pairs from the sets of x and y coordinates and graph my ordered pairs on a coordinate grid