MTH1W – Unit 6: Coordinate Geometry

Name: _____

Lesson 6.2: 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:

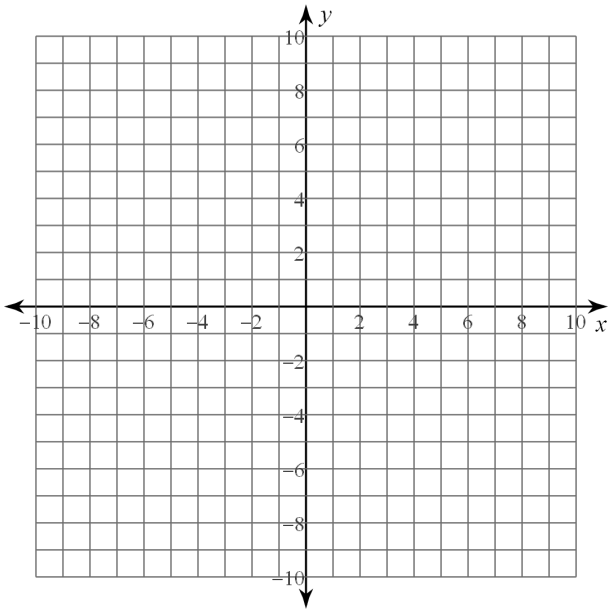
1. **Rearrange the equation so it is dependent variable = everything else (or y=_____)**
2. **Create a Table of Values and choose an appropriate set of x-coordinates.**
3. **Use that set and calculate the corresponding y-coordinates.**
4. **Create the point (x,y).**
5. **Plot the points.**
6. **Draw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

Your table of values should look like this:

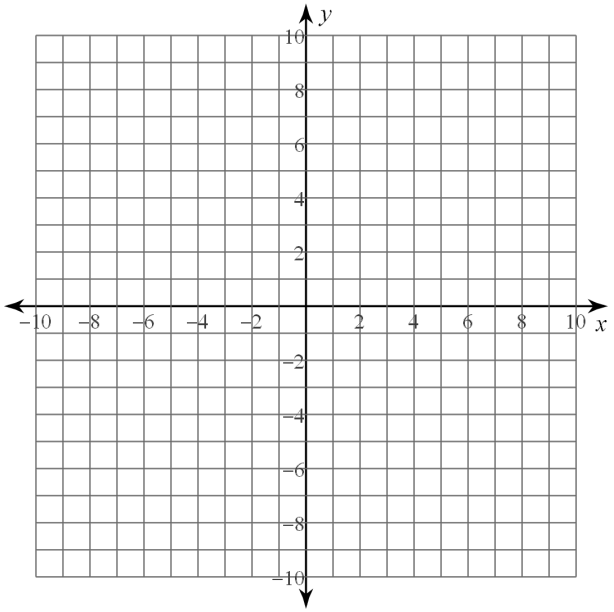
x	y	(x,y)
Set of x-coordinates	Corresponding y-coordinates	Set of points to plot

Examples:

1. $y = x - 3$



2. $y = -3x + 4$



Strategies for converting to y=

1) $y + 3 = x - 5$ ② $3y + 2 = 5x + 1$ ③ $2y = 7(x - 1)$

Convert each equation into y=

2) $4x + y = -34$

3) $3x + 2y = -20$

4) $4x - y = 28$

5) $5x - 3y = 3$