Graphing other forms of an Equation

Previous tutorials have explored and graphed the following types of equations.

I'll review by comparing the look of each equation…

- How would I describe what's different in each equation?

$y = 2 - 4x$

$3x + 1 = -5$

- How would I describe the type of line that could be graphed using each of these equations?

$2y - 2 = 10$

Let's include a new form of an equation…
How would I describe the look of this new equation?

$x + y = 8$

In preparation for graphing, I'm asked to make a table of values.

- How would I explain the values that I'll record in my table?

x	y

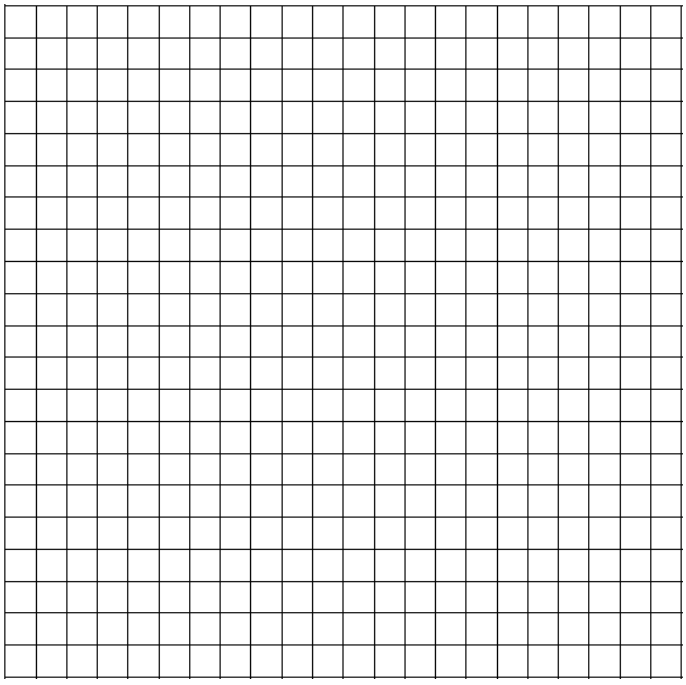
Continuing with my solution path…

- How would I describe what I'm doing when I…
  substitute each value of x?

x	y
-3	?
0	?
3	?

- How would I explain and demonstrate…
  solving for y?

- How could I use the coordinate values, shown in my table, to prepare the grid for graphing the equation?



- How would I use the coordinate values, shown in my table, to locate and plot the points that will be part of my graph?

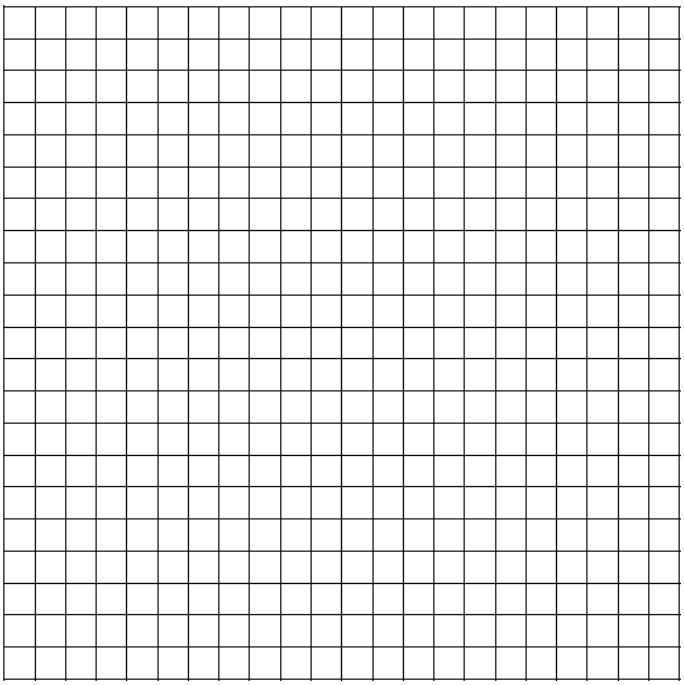
I'll summarize and review the steps of my solution path for graphing an equation in the form *ax+by=c*…by graphing a new equation.

$$3x - 2y = 6$$

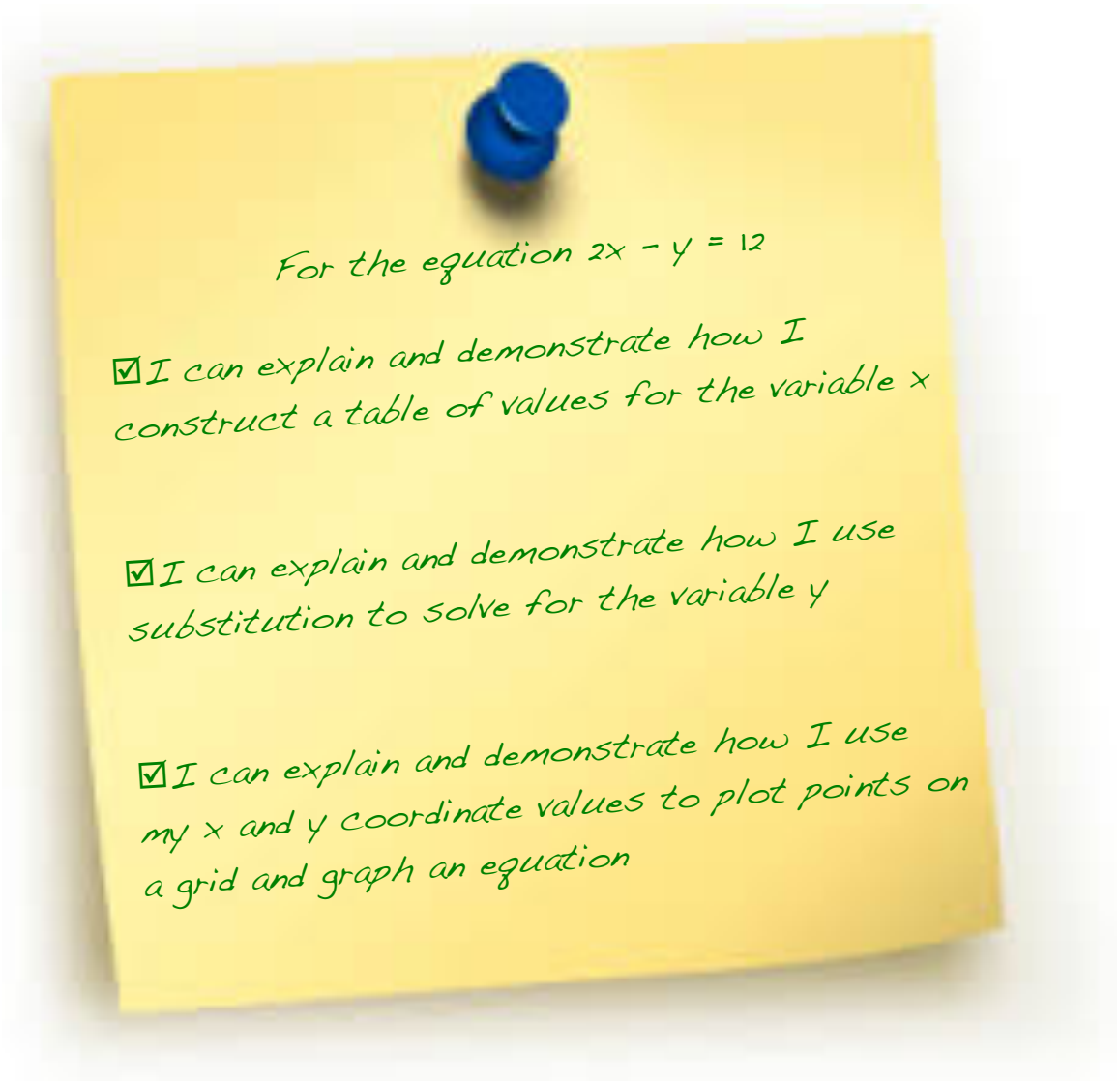
- How would I explain and demonstrate making a table of values?

- How would I explain and demonstrate my substitution step and solving for the variable y?

- How would I explain and demonstrate graphing the equation?



Graphing other forms of an Equation-Skills Checklist



For the equation $2x - y = 12$

☑I can explain and demonstrate how I construct a table of values for the variable x

☑I can explain and demonstrate how I use substitution to solve for the variable y

☑I can explain and demonstrate how I use my x and y coordinate values to plot points on a grid and graph an equation

Graphing other forms of an Equation-Worksheet