# Module 7 Lesson 7
# Try This

**TT 1.** Consider the equation $x + y = 5$.

**a.** How many different combinations of *x*-values and *y*-values could satisfy the equation?

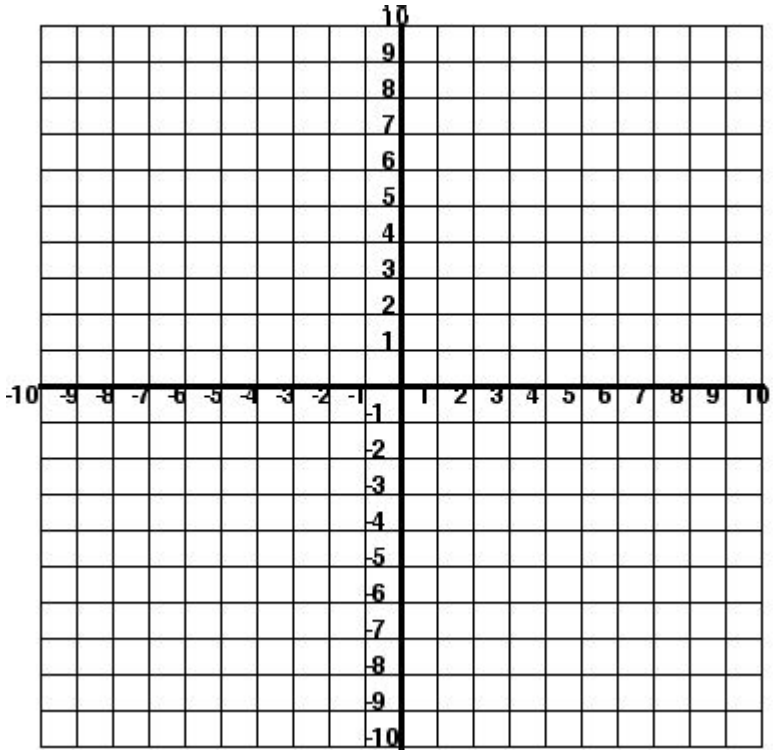
**b.** Assume the *x*-value and *y*-value that satisfies the equation are whole numbers. List the different combinations in a table. ( Hint – make a table of values)

**TT 2.** Now consider the equation $x + 3y = 9$.

**a.** Assume that the *x*-value and the *y*-value that satisfies the equation are whole numbers. List the different combinations in a table. ( another table of values)

**b.** Which combination(s) of *x*- and *y*-values would satisfy both $x + 3y = 9$ and $x + y = 5$?

**TT 3.** Graph the equation $x + y = 5$ on the grid below.




**TT 4.** Graph the equation $x + 3y = 9$ on the same grid.

**TT 5.** Identify the point where the two lines intersect.

**TT 6.** What do you notice about the coordinates of the point of intersection and the answer to question TT 2.b.?

**TT 7.** How can you check that the coordinates of the point of intersection satisfy both equations?