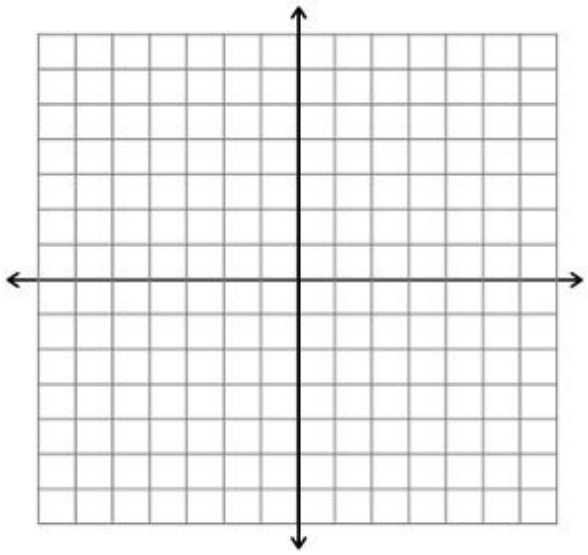
Day 2: Practice Solving Systems with Multiple Representations

Last class we learned that the SOLUTION to a SYSTEM OF EQUATIONS is where the graphs INTERSECT on a coordinate plane, and where the x- and y-values are the SAME in a table.

Jaylen is planning a garden for the summer. At a nursery, he purchases four tomato plants and two sunflower plants which totals to $8. Persephone, the owner of the nursery, notices that one sunflower plant costs the same as one tomato plant plus $1. How much does each type of plant cost?

Your Task:

- Represent this problem with equations, tables, and a graph.
- Use *each* representation to find the solution. Check your work.

Define variables and write two Equations	Table
Graph 	How can you check your work?

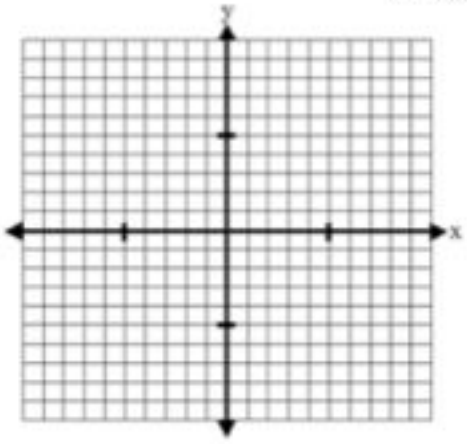
Solving Systems of Linear Equations by Graphing

There are **three types of Solution:**

One Solution	No Solution	Infinite Solutions

Example 1: Solve.

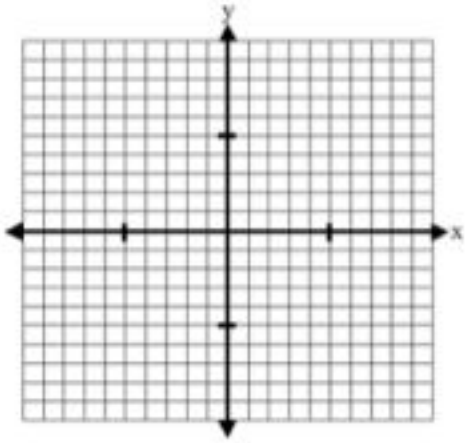
$y = 2x - 3$
$y = x - 1$



Solution: _____

Example 2: Solve.

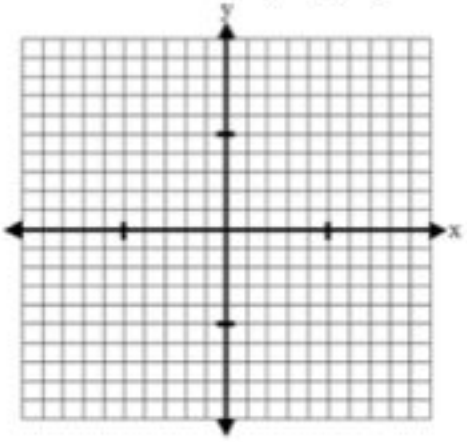
$y = -x + 5$
$y = -\frac{7}{3}x + 9$



Solution: _____

Example 3: Solve.

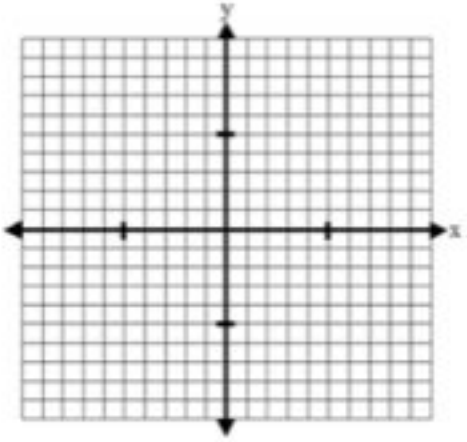
$y = -2x + 1$
$y = -2x - 1$



Solution: _____

Example 4: Solve.

$2x + 4y = 8$
$y = -\frac{1}{2}x + 2$



Solution: _____