Solving a Systems of Equations BY GRAPHING

❶ Solve each equation for y.

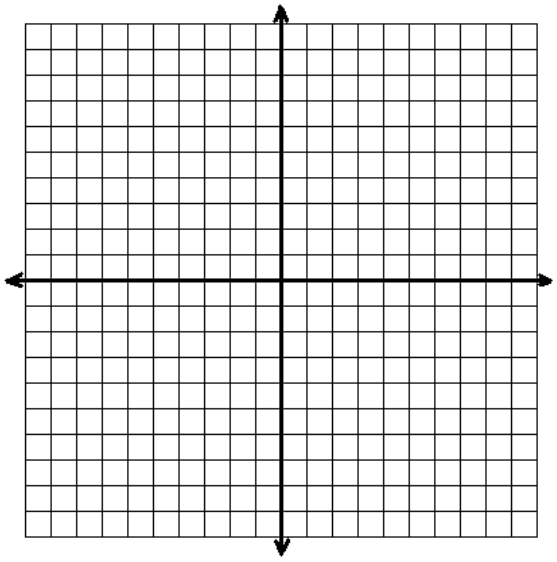
❷ Graph all equations on the same coordinate grid.

❸ Look for the point of intersection.

$$\begin{cases} 4y - x = 16 \\ y = \frac{3}{2}x - 1 \end{cases}$$

❶

❷



❸

Solving a Systems of Equations BY SUBSTITUTION

❶ Solve one equation for one variable. Choose an easy one!

❷ Substitute the equation from ❶ into another equation.

❸ Solve for the remaining variable.

❹ Use the new value from ❸ to find the other variable's value.

❺ Write as an ordered pair.

$$\begin{cases} x + 2y = 8 \\ y = 2x - 1 \end{cases}$$

❶

❷

❹

❸

❺

Solving a Systems of Equations BY ELIMINATION

❶ Line up like terms for all equations.

❷ Look for inverse coefficients (like 3x and -3x) that will eliminate one variable. If you can't find some, make some by multiplying.

❸ Eliminate one variable and solve for the other.

❹ Use the new value from ❸ to find the other variable's value.

❺ Write as an ordered pair.

$$\begin{cases} 3y + x = 4 \\ y - 2x = 6 \end{cases}$$

❶

❷

❸

❹

❺