Substitution Method
Two Ways to Solve Problems

<u>Method 1: Using Substitution by Setting Equations Equal to Each Other</u>
When both equations are written in slope-intercept form, set them equal to each other to solve.
Think Break-Even Problems!

$$\begin{cases} y = -4x + 8 \\ y = x + 7 \end{cases}$$

Step 1: Write an equation containing only 1 variable and solve it.

Step2: Solve for the other variable in either equation.

Method 2: Using Substitution and the Distributive Property

$$\begin{cases} 3y + 2x = 4 \\ -6x + y = -7 \end{cases}$$

Step 1: Solve the second equation for y because it has a coefficient of **1**.

Step 2: Write an equation containing only 1 variable and solve it.

Step 3: Solve for the other variable in either equation.