Steps to Solve an Equation

1. **Draw a line** through the equal sign to divide the equation into two parts.

2. I**dentify the variable**. If the variable is on both sides of the equation, you need to first move it to just one side.

    Ex. $4y + 16 = 52 - 2y$
    $\quad\quad +2y \quad\quad\quad\quad +2y$

    $\quad\quad 6y + 16 = 52$

3. Ask yourself: "What is being done to the variable?"
    Variable is "y." The "y" is being multiplied by 6 and added 16

4. Solve any addition or subtraction on the side of the variable first. Then solve any multiplication or division.

    Ex. $6y + 16 = 52$
    $\quad\quad\quad -16 \quad\quad -16$

    $\quad\quad 6y \quad\quad = 36$

(Remember that whatever you do on one side of the equation, you must do on the other side as well.)

$$\frac{6y}{6} = \frac{36}{6}$$

$$y = 6$$

5. We are done when the variable is alone