

Solving Equations with Variable on Both Sides

Step 1 - Distribute if necessary.

Step 2 - Combine like terms on the same side, if necessary.

Step 3 - Move your variables to the same side using opposite operations.

Step 4 - Move your constants to the same side using opposite operations.

Step 5 - Solve for your variable.

$$\begin{array}{r|l} -2 + 10p & = 8p - 1 \\ -8p & -8p \\ \hline -2 + 2p & = -1 \\ +2 & +2 \\ \hline 2p & = 1 \\ 2 & 2 \\ \hline p & = \frac{1}{2} \end{array}$$

$$\begin{array}{r|l} 4(2y - 8) & = \frac{1}{7}(49g + 70) \\ 8y - 32 & = 7g + 10 \\ -7g & -7g \\ \hline y - 32 & = 10 \\ +32 & +32 \\ \hline y & = 42 \end{array}$$