

Solving Equations With Variables on Both Sides

To solve equations with _____ on _____

_____ on the same side. (It can be easier

to collect the variables on the side with the term that has the

Example #1 Solve:

$$2x + 3 = 3x + 5$$

Subtract $2x$ from each side

Simplify

Subtract 5 from each side

Solution. x is alone.

Example #2 Solve:

$$8n - 4 = 3(2n - 8)$$

Use the distributive property

Subtract $6n$ from each side

Simplify

Add 4 to each side

Simplify

Divide each side by 2

Solution. n is alone.

Practice:

1.) $-5x + 6 = x + 12$

2.) $7y = 3(5y - 8)$

3.) $6(x - 3) = 4(x + 3)$

4.) $\frac{7}{2}p + 12 = 6 + \frac{5p}{2}$

5.) Find the value of x so that the figure is a square.

