Name: _____ CCM8

Solving Equations with Variables on Both Sides

Steps:

1	
2	
3	
4	
5	

Examples:

Check:

1. $6x + 3 = 8x - 21$

2. $40 + 1.5h = 3.5h$

3. $-36 + 2w = -8w + w$

4. $6x = 4(x + 5)$

Examples: Check:

1. $\frac{2x}{5} - \frac{3}{5} = -\frac{1}{5} - \frac{x}{5}$

2. $\frac{3x}{5} + \frac{1}{15} = 4 + \frac{2x}{3}$

Identity and No Solution:
Sometimes when you try to solve an equation, your variable cancels out completely.
If what is left is a true statement, then your answer is "Identity"
"Identity" means that all real numbers are solutions:

$5x + 6 = 2x + 6 + 3x$

Sometimes when you try to solve an equation, your variable cancels out completely.
If what is left is a false statement, then your answer is "no solution"
"No Solution" means no value of your variable will work.

$4x - 10 + 2x = 6x - 3$

You Try:

1. $2(x + 3) = 2x + 6$

2. $3(x + 4) = 3x + 4$