How do you solve multi-step linear equations with variables on both sides?

- Collect all of the terms side and combine like with the variable on one
- Collect all the constants equation and combine on the other side of the like terms.
- Solve the resulting onestep equation

If the equation has parentheses 7x + 19 = -2x + 55

2x + 3(4x - 3) = 8 - 3x

1. Use the distributive property

Combine like terms on the same side of the equality.

to eliminate the parentheses

16 - 3x = 11 + x

-4 - (2 - 3x) = 3(2x - 1) + 5

S Solve the resulting one-step equation.

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Collect all the constants on

combine like terms.

equation and combine like

the other side of the

3. Collect all of the terms with Now proceed as listed above.

the variable on one side and

Graphic Organizer by Dale Graham and Linda Meyer Thomas County Central High School: Thomasville GA

Note: If your variables cancel out, then you look at the arithmetic statement and determine whether it is true or false. If true, then the solution is all real numbers. If false, then there is no solution