SIDE NOTES

Look both ways before solving!

To get a value to the OPPOSITE side, perform the OPPOSITE operation

Solving a Linear Equation

adapted from 2.3 Lial, Introductory & Intermediate Algebra

Step 1 **Simplify each side separately.** Use the distributive property as needed, and then combine like terms <u>on each individual side.</u>

Step 2 **Isolate the variable term on one side.**

1.) Add/ subtract variable terms to result in 1 positive variable. (Move the one less in value)

2.) Undo Add/ Sub of the constant on the variable side. <u>This is so that the variable term is on one side of the equation and a number is on the other.</u>

Please note: it is perfectly fine if you get the constants to one side first and then do the variables; doing the variables 1st is just ideal.

Step 3 **Isolate the variable.** Undo multiplication/division to get the equation in the form x = a number, or a number = x. (Other letters may be used for the variable.)

Step 4 **Check.** Substitute the proposed solution into the *original* equation to see if a true statement results.

SUMMARY/ EXTRA POINTS/ DIAGRAM

SIDE NOTES

Math "Hot Topics" Workshop #1: Solving Linear Equations in 1 Variable

Useful tips for solving equations successfully!

1.) There are two steps to simplifying:

A.) Distribute B.) Combine Like terms

2.) **"Look BOTH ways before Solving"**- You need to 1st make sure that each side is as simplified as possible.

3.) Skip lines on your looseleaf and Write BIG

4.) Put a vertical line down your paper where the equal sign is, so that you solve correctly.

5.) To bring a value to the OPPOSITE side of the equal sign, perform the OPPOSITE operation.

6.) It may help to solve by performing the opposite operations underneath the equation, rather than alongside the equation.

7.) _____

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8.) _____

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SUMMARY/ EXTRA POINTS/ DIAGRAM