

Solving Equations and Inequalities Rules

Solving Equations

- Step 1: Put the line down the equal sign.
- Step 2: Find the variable or letter.
(Goal: To get the variable by itself.)
- Step 3: Make sure all the variables are on the same side of the equation, if not move the smaller one to the other side.
(Use Inverse Operation)
- Step 4: Remember that whatever you do to one side of the equation, you must do the same thing to the other side (Property of Equality).
- Step 5: Combine variables that are on the same side if needed.
- Step 6: Cover the variable and see what you have to move first, usually the one that is not connected to the variable.
- Step 7: Use Inverse Operation and Property of Equality to move a number to the other side of an equation.
- Step 8: Continue to cover the variable again until you have isolated the variable or there is nothing but the variable left on one side of the equation.
- Step 9: Use Inverse Operation and Property of Equality to move a number to the other side of an equations.
- Step 10: When the variable is by itself, then the equation is solved.

Solving Inequalities

Same as solving equations except for when you ***multiply or divide*** by a *negative number*, this changes the inequality to its opposite.

Reminder:	less than	<
	greater than	>
	less than or equal to	≤
	greater than or equal to	≥

Remember that the less than sign looks like the letter "L".