Expressions and Equations

Solving Multi Step Equations :

1. Eliminate any parentheses. Usually this means using the distributive property.
2. Combine like terms.
3. Solve by following the steps for a two step equation.
4. Check your answer. Substitute it back into the original equation and solve.

Solving Equation Word Problems :

1. Determine what you are trying to figure out. This will be the value of your variable.
2. Write an equation to represent the situation. Remember, you will need one variable and an equal sign.
3. Solve.
4. Check to make sure your answer is a solution to the equation you wrote and also check to make sure your answer makes sense in the context of the problem.

Number of Solutions :

No Solution:
When you solve an equation with variables on both sides and eliminate the variables completely, leaving an untrue statement, the equation has no solutions.

Infinite Solutions:
When you solve an equation with variables on both sides and eliminate the variables completely, leaving a true statement, the equation has an infinite number of solutions.

One Solution:
When you solve an equation and arrive at a single answer.

Distributive Property :

To "distribute" means to give. The number, variable, or term outside a set of parenthesis must be multiplied by every term inside the parenthesis.