Algebra Basics: Solving 2-Step Equations -

we learned how to solve simple equations that had only one arithmetic operation in them. However, often, equations have many different operations which makes solving them a little more complicated. To solve equations that have two arithmetic operations in them are going to require two different steps to solve them. To get the unknown all by itself, you have to undo two operations. To undo those two operations, we need to use their inverse operations subtraction and division. In math, math, we have a special set of rules that tell us what order to do operations in. The best strategy is to apply those order of operations rules in reverse when solving equations. To undo an equation, we should undo any operations that the unknown value is involved with so that the value will be all by itself. Math's order of operations rules say we are supposed to do operations that are inside of groups first. That means that when we are solving equations and undoing operations, we need to wait to do groups last of all. So in this problem, we should start by undoing the multiplication that 's implied between the 2 and the group x + 2 to multiply both sides by 2. On the other side, we have 2 times 5 which is 10. So our answer is x = 10.

In algebra, the fraction line is used as a way to automatically group things above it or things that are below it. The x 1 on top forms a group and everything on the bottom of the line forms another group. The first step is to undo the divided by 2 by multiplying both sides of the equation by 2. On the other side, we have 8 plus 1 which is 9. So in this equation, x = 9. Remember to undo operations using the reverse order of operations rules. Pay close attention to how things are grouped in an equation and be on the lookout for those implied groups on the top and bottom of a fraction line. Practice by trying to solve lots of different problems.