



Tips and Tricks

Addition and subtraction are opposites

When you see **addition** in an isolating problem, **subtract** the same amount being added to both sides to cancel it out

When you see **subtraction** in an isolating problem, **add** the same amount being subtracted to both sides to get rid of it

Multiplication and Division are opposites

When you see **multiplication** in an isolating problem, **divide** both sides by the amount being multiplied

When you see **division** in an isolating problem, **multiply** both sides by the amount being divided

Variables are numbers with unknown values, so if you subtract 3 from x it would look like $x-3$

When isolating a variable (getting it to be by itself on one side of an equal sign) you should move everything that is not attached to the variable first

Example:

$$3x-1=2$$

Step 1: $+1 +1$ add 1

$$\underline{3x=3}$$

Step 2: $3 \quad 3$ divide both sides by 3

$$x=1$$

Make sure to do every step to **both** sides

The order of operations is used when simplifying and solving equations, not always during isolating variables

Order of operations:

Parenthesis

Exponents

Multiplication

Division

Addition

Subtraction

*Remember to take your time, check your work, and study hard

Good luck!