

Solving Linear and Literal Equations and Inequalities

By Beryl Stemen
Owens Community College
Toledo, OH

Rules for solving linear and literal equations:

I. Simplifying equations:

- Get rid of grouping symbols, especially if the letter is inside.
- Get rid of denominators, especially if the letter is in the denominator.
- Combined like terms on the left of = and/or on the right of =.

II. Move terms: (+,-)

- Move letter terms first, if necessary, to one side of the equation.
- Move number terms next, but to the other side of the equation.

III. Get rid of: (\div , \times)

- If the letter term is negative, then change the signs of all terms in the equation (both sides of the =). That way you won't forget about the negative sign.
- Get rid of everything, except for the letter that you are solving for by using division and/or multiplication.

Solving inequalities:

- Use the same steps as for solving equations.
- In step III when you get rid of the negative sign, also change the inequality sign.