

Inequalities

Solving inequalities have the same rules as solving an equation, with one exception: Whenever you multiply or divide both sides of an inequality by a negative number the sign of the inequality changes direction.

Example: $-3x - 2 > 7$
 $-3x - 2 + 2 > 7 + 2$ add 2 to both sides
 $-3x > 9$ Now divide each side by a "- 3 "
the sign changes direction.
 $-3x/-3 < 9/-3$
 $x < -3$

Inequality signs:

$>$ greater than

$<$ less than

\geq greater than or equal to

\leq Less than or equal to