

* Rules to solve inequalities \Rightarrow

Rule 1 \Rightarrow Equal number may be added or subtracted from both sides of an inequality without affecting the sign of inequality.

Rule 2 \Rightarrow when both sides are multiplied or divided by a negative number, then sign of inequality is reversed. Sign of inequality is not reversed for multiplying or dividing a positive number.

* Procedure to solve a linear inequality in one variable

- (i) Simplify and collect like terms
- (ii) Remove fraction (or decimals) by multiplying both sides by an appropriate number/factor
- (iii) Isolate all variable terms one side and all constants on other side.
- (iv) Make the co-efficient of variable 1.
- (v) choose the equation's solution set from the given replacement set.