

Solving Inequalities Flowchart

Name _____

Date _____



Start here:

Read the inequality.

Identify the operations in the variable expression.
(+, -, x, ÷)

Write a related addition expression, if you see a subtract symbol.

Now, simplify both expressions

1. Distribute if there are parentheses or, if there are like terms on one side that need to be combined, do that.
2. Then, make sure all variable terms are on one side only

Reverse the inequality symbol, if the variable was *multiplied* or *divided* by a negative number.

Temporarily replace the inequality symbol with an equal sign.

Next, isolate the variable

1. Perform the inverse of any multiplication or division.
2. Performing the same operation on the other expression in the inequality.

Replace the = with the appropriate inequality symbol.

Check: Substitute a reasonable value for the variable in the original inequality and check.

Write and show what you will do to this inequality for each step of the flow-chart.



Start here:

Read the inequality.

$$-2(n - 1) < -3n + 10 + 3n$$

Identify the operations

Write a related addition expression

Now, simplify both expressions

Reverse the inequality symbol if needed.

Replace the inequality symbol with =.

Next, isolate the variable

Replace the =

Check