

Solving and Graphing Inequalities Notes

Goal of Solving Inequalities:

Steps:

Same steps as solving equations.

Only difference is when dividing by a negative, flip the inequality

Inverses Reminder:

Addition and Subtraction

Multiplication and Division

Dividing by a Negative:
When dividing by a negative, flip the inequality

Flipping the Inequality:

$< \rightarrow$ _____

$> \rightarrow$ _____

$\leq \rightarrow$ _____

$\geq \rightarrow$ _____

$< \quad > \quad \leq \quad \geq$

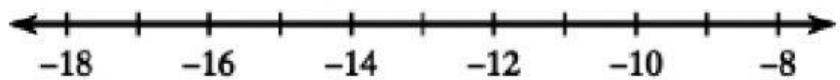
Example 1:

$$x - 12 \leq -24$$

$$x \leq$$

Interval Notation Solution:

$x =$



Graphing Tool Kit:

$\circ$ $\bullet$ $\rightarrow$ $\leftarrow$

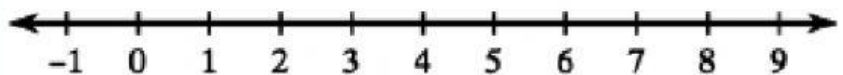
Example 2:

$$-2x < -6$$

$$x >$$

Interval Notation Solution:

$x =$



Graphing Tool Kit:

$\circ$ $\bullet$ $\rightarrow$ $\leftarrow$