

- Use same steps as if you were solving an equation
- If you divide both sides of the inequality by a negative number - reverse the inequality sign
- Graph the simplified inequality

Example

Solve and graph the solution  $-2(4x+1) < 10$

$$\begin{array}{r} -2(4x+1) < 10 \\ -8x - 2 < 10 \\ \hline \phantom{-8x} + 2 \phantom{+ 2} \end{array}$$

$$\frac{-8x}{-8} < \frac{12}{-8}$$

$$x > -\frac{12}{8}$$

Graph  $\rightarrow x > -\frac{3}{2}$

(inequality sign reversed - divided both sides by negative number)

