

- 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 $-2(4x + 1) < 10$

$$\begin{aligned} -2(4x + 1) &< 10 \\ -8x - 2 &< 10 \\ \underline{+2 \quad +2} \end{aligned}$$

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

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

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

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

