

Unit
13

CT

Notes 4.1 Graphing and Solving Inequalities

$\circ \rightarrow$ $>$ is greater than "over" "more than"

$\bullet \rightarrow$ \geq is greater than or equal to "at least"

$\leftarrow \circ$ $<$ is less than "under"

$\leftarrow \bullet$ \leq is less than or equal to "at most" "no more than"

When you multiply or divide by a negative number, you reverse the inequality symbol.

examples

$$\begin{array}{l} -3x > 12 \\ * \quad \frac{-3x}{-3} > \frac{12}{-3} \end{array}$$

$$x < -4$$



same as

$$-4 > x$$

$$\begin{array}{l} -4 \cdot \frac{x}{-4} \leq -5 \cdot -4 \\ \downarrow \end{array}$$

$$x \geq 20$$



same as

$$20 \leq x$$