

Solving Inequalities

Inequalities: $>$, $<$, \geq , and \leq

Solve and graph each inequality.

$$\textcircled{1} \quad 3(x+2) + 13 > 55$$

$$3x + 6 + 13 > 55$$

$$3x + 19 > 55$$

$$\begin{array}{r} -19 \quad -19 \\ \hline \end{array}$$

$$\frac{3x}{3} > \frac{36}{3}$$

$$x > 12$$



$$\textcircled{2} \quad -3(x+4) + 3 \geq 9$$

$$-3x - 12 + 3 \geq 9$$

$$-3x - 9 \geq 9$$

$$\begin{array}{r} +9 \quad +9 \\ \hline \end{array}$$

$$\frac{-3x}{-3} \geq \frac{18}{-3}$$

$$x \leq -6$$

Reverse
the
Inequality

