

Inequality

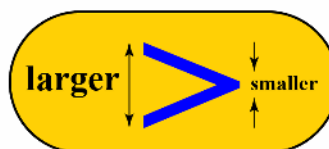
Did you know?

Expression $2x + 7$

Equation $3x + 4 = 9$

Inequality $6x + 1 > 13$

Symbols



$>$ greater than

\geq greater than or equal

$<$ less than

\leq less than or equal

Example

$$\begin{array}{r} -3x \leq 6 \\ -3x \leq 6 \\ \hline -3 \quad -3 \\ x \leq -2 \end{array} \quad \text{ditch the } -3$$

$$\begin{array}{r} 2x - 5 \geq 7 \\ +5 \quad +5 \quad \text{ditch the } 5 \\ \hline 2x \geq 12 \\ \frac{2x}{2} \geq \frac{12}{2} \quad \text{ditch the } 2 \\ x \geq 6 \end{array}$$

Assignment

Solve:

1. $2x + 5 < 9$

2. $2x + 5 > 9$

3. $9 > 2x + 5$

4. $10 > 2x + 5$

5. $10 \geq 2x + 5$

9. $5 - x \geq -10$

10. $5 - x \leq -10$

11. $5 - 5x \leq -10$

12. $6 - 5x \leq -10$

13. $-5x + 6 \leq -10$