

# Lesson 9 Solve Two-Step Inequalities

11-2-15

Glencoe Math 7

- Remember
- 1) Solve using inverse operations to isolate the variable
  - 2) Use order of operations backwards (1 Add/Subtract (2 Multiply/Divide)
  - 3) When multiplying or dividing both sides by a negative number →  
FLIP THE SYMBOL!

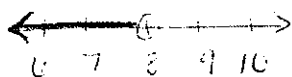
x.1: Solve and graph.

A)  $2x + 8 < 24$

$$\begin{array}{r} 2x + 8 < 24 \\ -8 \quad -8 \\ \hline \end{array}$$

$$\frac{2x}{2} < \frac{16}{2}$$

$$x < 8$$

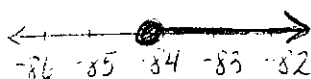


B)  $-\frac{4}{7} - 3 \leq 9$

$$\begin{array}{r} -\frac{4}{7} - 3 \leq 9 \\ +3 \quad +3 \\ \hline \end{array}$$

$$\frac{-4}{7} \leq 12 \cdot -7$$

$$y \geq -84$$



C)  $6 - 10x < 36$

$$\begin{array}{r} 6 - 10x < 36 \\ -6 \quad -6 \\ \hline \end{array}$$

$$\frac{-10x}{-10} < \frac{30}{-10}$$

$$x > -3$$

