

Solving
MULTI-STEP
Inequalities

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(w/ variables on both sides)

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Solving
ONE-STEP
Inequalities

Solving
TWO-STEP
Inequalities

$$1 \quad x + 9 < 15$$

$$2 \quad x - 3 \geq -6$$

$$7 \quad 4x - 7 > 5$$

$$3 \quad 3x \leq -27$$

$$4 \quad \frac{x}{7} < -3$$

$$5 \quad -8x > 40$$

$$6 \quad \frac{x}{-4} \geq -9$$

$$8 \quad -2x + 2 \leq -18$$

*Don't Forget:

$$9 \quad 12(x - 3) + 2x > 6$$

$$11 \quad 4(2 - x) \leq 5(x - 2)$$

$$10 \quad x - 3(x + 2) < 4$$

$$12 \quad 2(4 - x) < 3x - 7$$

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Answer Key!

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$$\begin{array}{l} 1 \quad x + 9 < 15 \\ \quad -9 \quad -9 \end{array}$$

$$x < 6$$

$$\begin{array}{l} 2 \quad x - 3 \geq -6 \\ \quad +3 \quad +3 \end{array}$$

$$x \geq -3$$

$$\begin{array}{l} 7 \quad 4x - 7 > 5 \\ \quad +7 \quad +7 \end{array}$$

$$\frac{4x}{4} > \frac{12}{4}$$

$$x > 3$$

$$\begin{array}{l} 3 \quad \frac{3x}{3} \leq \frac{-27}{3} \end{array}$$

$$x \leq -9$$

$$\begin{array}{l} 4 \quad 7 \cdot \frac{x}{7} < -3 \cdot 7 \end{array}$$

$$x < -21$$

$$\begin{array}{l} 5 \quad \frac{-8x}{-8} > \frac{40}{-8} \end{array}$$

$$x < -5$$

$$\begin{array}{l} 6 \quad -4 \cdot \frac{x}{-4} \geq -9 \cdot -4 \end{array}$$

$$x \leq 36$$

***Don't Forget:** You must switch the inequality when multiplying or dividing by a negative!

$$\begin{array}{l} 8 \quad -2x + 2 \leq -18 \\ \quad -2 \quad -2 \end{array}$$

$$\frac{-2x}{-2} \leq \frac{-20}{-2}$$

$$x \geq 10$$

$$\begin{array}{l} 9 \quad 12(x - 3) + 2x > 6 \\ \quad 12x - 36 + 2x > 6 \end{array}$$

$$\begin{array}{l} 14x - 36 > 6 \\ \quad +36 \quad +36 \end{array}$$

$$\frac{14x}{14} > \frac{42}{14}$$

$$x > 3$$

$$\begin{array}{l} 10 \quad x - 3(x + 2) < 4 \\ \quad x - 3x - 6 < 4 \end{array}$$

$$\begin{array}{l} -2x - 6 < 4 \\ \quad +6 \quad +6 \end{array}$$

$$\frac{-2x}{-2} < \frac{10}{-2}$$

$$x > -5$$

$$\begin{array}{l} 11 \quad 4(2 - x) \leq 5(x - 2) \\ \quad 8 - 4x \leq 5x - 10 \\ \quad +4x \quad +4x \end{array}$$

$$\begin{array}{l} 8 \leq 9x - 10 \\ +10 \quad +10 \end{array}$$

$$\frac{18}{9} \leq \frac{9x}{9}$$

$$2 \leq x \quad x \geq 2$$

$$\begin{array}{l} 12 \quad 2(4 - x) < 3x - 7 \\ \quad 8 - 2x < 3x - 7 \\ \quad +2x \quad +2x \end{array}$$

$$\begin{array}{l} 8 < 5x - 7 \\ +7 \quad +7 \end{array}$$

$$\frac{15}{5} < \frac{5x}{5}$$

$$3 < x \quad x > 3$$

Directions

Step 1: Print pages 1 & 2 front to back (flip along the short edge)

Step 2: Have students fold over the top and bottom halves to the solid line in the center. Then, have them cut in between the two rectangles, creating four tabs.

The final product should look like this:

