

Name: *Key*

Quarter 1 Review – Day 3

Objective: Absolute Value Equations – I can solve an absolute value equation.

Solve the absolute value equation.

A. $|x - 5| = 12$

$$\begin{array}{l} \widehat{x-5} \\ x-5=12 \quad x-5=-12 \\ \boxed{x=17} \quad \boxed{x=-7} \end{array}$$

B. $-2|3x - 5| - 4 = 20$

$$\begin{array}{l} +4 \quad +4 \\ -2|3x-5| = 24 \\ \frac{-2}{-2} \quad \frac{24}{-2} \\ |3x-5| = -12 \\ \boxed{\text{No solution}} \end{array}$$

Objective: Linear Inequalities – I can solve and graph a linear inequality.

Remember: **FLIP THE SIGN WHEN DIVIDING OR MULTIPLYING BY A NEGATIVE**

C. $-3(2x - 2) > 12$

$$-6x + 6 > 12$$

$$-6x > 6$$

$$\boxed{x < -1}$$



D. $4x - 15 \leq 2(2x - 4)$

$$4x - 15 \leq 4x - 8$$

$$-15 \leq -8$$

true

$\boxed{\text{all real solutions}}$

