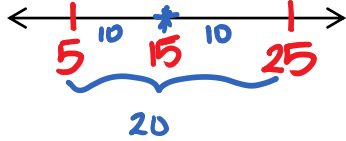


NAME:

UNIT 2- DAY 3 HOMEWORK

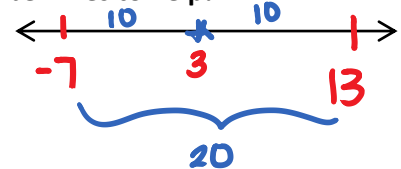
(1-2) Write an absolute value equation with the given solutions. Use the number lines to help!

1. $t = 5$ and $t = 25$



$|x - 15| = 10$

2. $p = -7$ and $p = 13$



$|x - 3| = 10$

check by solving mathematically

(3-6) Solve for the given variables. Check for extraneous solutions!

3. $|2x - 6| = x$

\oplus $2x - 6 = x$
 $2x - 6 = x$
 $-6 = -x$
 $x = 6$

\ominus $2x - 6 = -x$
 $2x - 6 = -x$
 $-6 = -3x$
 $x = 2$

Check to see if it works 😊

4. $|2x + 5| = 11$

\oplus $2x + 5 = 11$
 $2x + 5 = 11$
 $2x = 6$
 $x = 3$

\ominus $2x + 5 = -11$
 $2x + 5 = -11$
 $2x = -16$
 $x = -8$

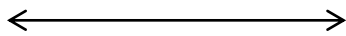
Flip to the back 😊

NAME:

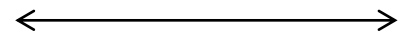
UNIT 2- DAY 3 HOMEWORK

(1-2) Write an absolute value equation with the given solutions. Use the number lines to help!

1. $t = 5$ and $t = 25$



2. $p = -7$ and $p = 13$



(3-6) Solve for the given variables. Check for extraneous solutions!

4. $|2x - 6| = x$

4. $|2x + 5| = 11$

Flip to the back 😊

$$5. 3 = |4x - 8| + 3$$

$$\begin{array}{r} -3 \quad -3 \\ \hline 0 = |4x - 8| \end{array}$$

⊕

$$4x - 8 = 0$$

$$4x = 8$$

$$x = 2$$

⊖

$$0 = 4x - 8$$

$$8 = 4x$$

$$x = 2$$

so... only one solution!

$$6. -3|5x + 1| - 7 = 14$$

$$\begin{array}{r} +7 \quad +7 \\ \hline \end{array}$$

$$\begin{array}{r} -3|5x + 1| = 21 \\ \hline -3 \quad -3 \end{array}$$

$$|5x + 1| = -7$$

∅

Can an absolute value equation equal negatives??

$$5. 3 = |4x - 8| + 3$$

$$6. -3|5x + 1| - 7 = 14$$