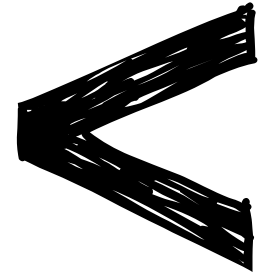
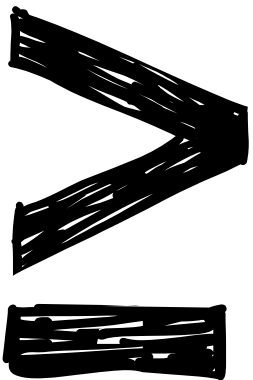
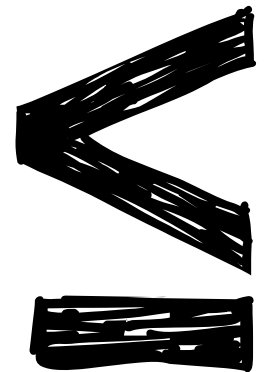


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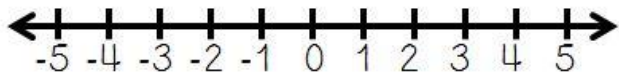
Absolute
Value
Inequalities
involving
Greater Than



Absolute
Value
Inequalities
involving
Less Than

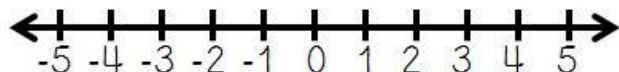


$$|x| < 2$$

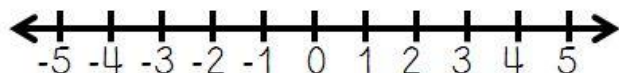


Solve each inequality & graph the solutions.

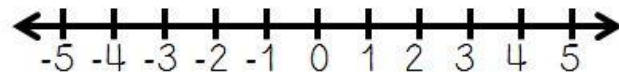
Example 1: $|x| + 8 < 12$



Example 2: $8|x + 4| \leq 8$

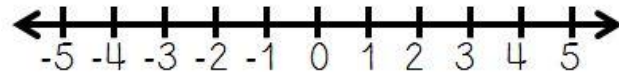


$$|x| > 2$$

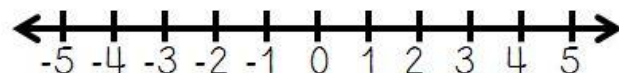


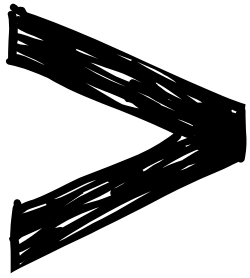
Solve each inequality & graph the solutions.

Example 3: $|x| - 24 > -21$



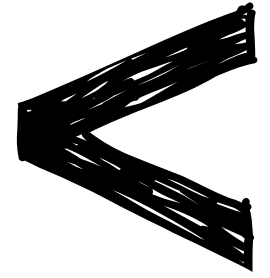
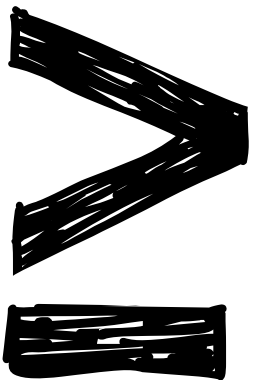
Example 4: $|x - 3| + 5 \geq 6$



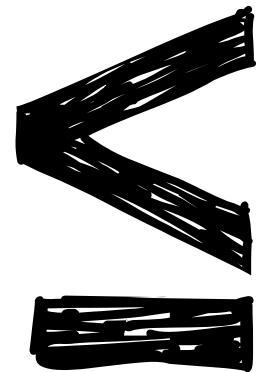


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Absolute
Value
Inequalities
involving
Greater Than



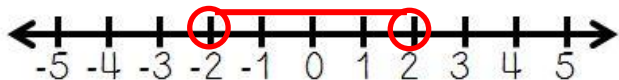
Absolute
Value
Inequalities
involving
Less Than



$$|x| < 2$$

$$x < 2 \text{ and } x > -2$$

$$-2 < x < 2$$



All inequalities involving $<$ or \leq will be "and".

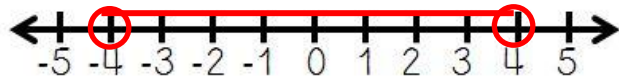
Solve each inequality & graph the solutions.

Example 1: $|x| + 8 < 12$

$$\begin{array}{cc} -8 & -8 \end{array}$$

$$|x| < 4$$

$$x < 4 \text{ and } x > -4$$



Example 2: $\frac{8|x+4|}{8} \leq \frac{8}{8}$

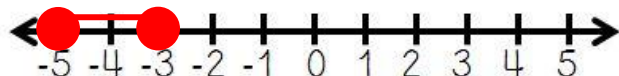
$$|x+4| \leq 1$$

$$x+4 \leq 1 \text{ and } x+4 \geq -1$$

$$\begin{array}{cc} -4 & -4 \end{array}$$

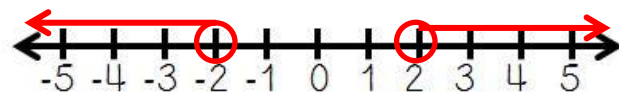
$$\begin{array}{cc} -4 & -4 \end{array}$$

$$x \leq -3 \text{ and } x \geq -5$$



$$|x| > 2$$

$$x > 2 \text{ or } x < -2$$



All inequalities involving $>$ or \geq will be "or".

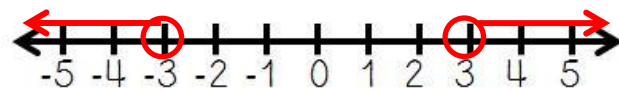
Solve each inequality & graph the solutions.

Example 3: $|x| - 24 > -21$

$$\begin{array}{cc} +24 & +24 \end{array}$$

$$|x| > 3$$

$$x > 3 \text{ or } x < -3$$



Example 4: $|x-2| + 5 \geq 7$

$$\begin{array}{cc} -5 & -5 \end{array}$$

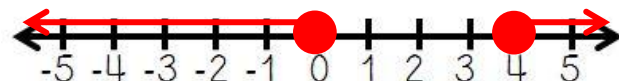
$$|x-2| \geq 2$$

$$x-2 \geq 2 \text{ or } x-2 \leq -2$$

$$\begin{array}{cc} +2 & +2 \end{array}$$

$$\begin{array}{cc} +2 & +2 \end{array}$$

$$x \geq 4 \text{ or } x \leq 0$$



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

Step 2: Fold in the front tabs to the center line.

The final product should look like this:

