



# Absolute Value Functions & Inequalities

▼ Class

Algebra 2

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## Absolute Value Functions

Parent Absolute Value Function:  $|x|$

- Vertex: (0,0)

General Form of Absolute Value Function:  $f(x) = a|x - h| + k$

- Vertex: (h, k)

## Absolute Value Equations

Switch the sign of the right side and calculate the **TWO** possibilities.

- Check for **extraneous solutions** (plug it back in)

## Absolute Value Inequalities

Similar to an equation **EXCEPT** you switch the *sign* and the *sign* of the right side.

**Example:**

$$\begin{array}{c} -2 | x | \geq -8 \\ \div -2 \qquad \div -2 \\ | x | \leq 4 \\ \swarrow \qquad \searrow \\ x \leq 4 \text{ and } x \geq -4 \end{array}$$