

Absolute Value:

Distance from zero on a number line.

Absolute value of a number gives a positive result
because DISTANCE IS ALWAYS A POSITIVE QUANTITY.

$$1. |-6| = 6$$

$$2. |13| = 13$$

$$3. 5 + |-3 + 7| =$$

$$\begin{array}{r} 5 + | -3 + 7 | \\ \swarrow \quad \searrow \\ 5 + 4 = 9 \end{array}$$

$$4. 4 - |-2| \\ 4 - 2 = 2$$

Absolute Value is a grouping symbol
like parentheses. You must simplify
inside before doing the absolute value.

Evaluate each expression for $E = -4$ $F = 6$ $G = -2$

$$1. -G + |E| - |F|$$

$$+2 + |-4| - |6|$$

$$2 + 4 - 6 \\ 6 - 6 = 0$$

$$3. |FG| - |E+G|$$

$$|6 \cdot -2| - |-4 + -2| \\ 12 - 6 = 6$$

$$2. -3|G| + E^2$$

$$\begin{aligned} &-3|-2| + (-4)^2 \\ &-3 \cdot 2 + -4^2 \\ &-3 \cdot 2 + 16 \\ &-6 + 16 \end{aligned}$$

$$10$$

$$4. |E| - 5|F|$$

$$|-4| - 5|6| \\ 4 - 30 = -26$$