

Absolute Value

Absolute value describes the distance of a number on the number line from 0 without considering which direction from zero the number lies. The absolute value of a number is never negative.

- The absolute value of 5 is 5.

distance from 0: 5 units



- The absolute value of -5 is 5.

distance from 0: 5 units



- The absolute value of $2 + -7$ is 5.

distance of sum from 0: 5 units



- The absolute value of 0 is 0. (This is why we **don't** say that the absolute value of a number is positive: Zero is neither negative nor positive.)

The symbol for absolute value is two straight lines surrounding the number or expression for which you wish to indicate absolute value.

- $|6| = 6$ means the absolute value of 6 is 6.
- $|-6| = 6$ means the absolute value of -6 is 6.
- $|-2 - x|$ means the absolute value of -2 minus x .
- $-|x|$ means the negative of the absolute value of x .