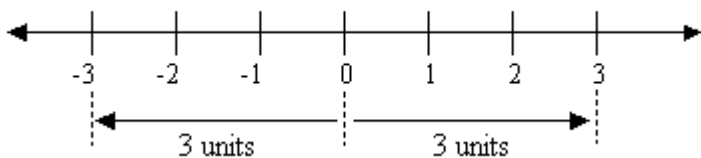


Opposites



The distance from 0 to 3 on the number line is (3) three units.
The distance from 0 to -3 on the number line is (3) three units.

Two numbers that are the same distance from zero on the number line, but on **opposite** sides of zero are called **Opposites**.

Example 1:

(-3) is opposite of (3) and (3) is opposite of (-3)

Note:

For a number (n): the opposite of (n) is (-n)
and the opposite of (-n) is (n)

Example 2:

- a. $-(3) = -3$ The opposite of positive three is a negative three.
- b. $-(-3) = 3$ The opposite of negative three is a positive three.

Using Symbols:

	<u>Equation</u>	<u>Read As</u>
1.	$6 + 2$	six plus two
2.	$+2$	positive two
3.	$6 - 2$	six minus two
4.	-2	negative two

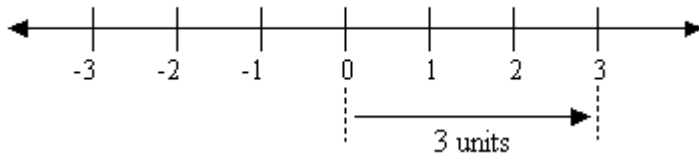
Absolute Value:

Absolute Value of a number is the distance from zero to that number on the number line.

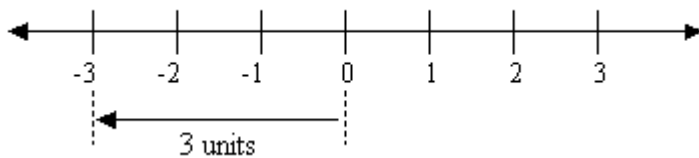
- a. That distance is never negative.
- b. The symbol for Absolute Value is “| |”.

Example of Absolute Value:

a. The distance from 0 to 3 is three units. Thus the $|3| = 3$ [The Absolute Value of 3 is 3]



b. The distance from 0 to -3 is three units. Thus the $|-3| = 3$ [The Absolute Value of -3 is 3]



Note:

The Absolute Value of a positive number is positive. $|5| = 5$

The Absolute Value of a negative number is positive. $|-5| = 5$

The Absolute Value of a Zero is Zero. $|0| = 0$