Working with Absolute Value

As discussed earlier in this unit, the *absolute value* of a number is actually the distance that number is from zero on a number line. Because distance is *always* positive, the result when taking the absolute value of a number is *always* positive.

The symbols for absolute value | | can also act as *grouping symbols*. Perform any operations within the grouping symbols first, just as you would within parentheses.

Look at these examples. Notice the digits are the same in each pair, but the answers are different due to the placement of the absolute value marks.

$|-7| + |5| = 7 + 5 = 12$
$|-7 + 5| = |-2| = 2$

$|6| - |-10| = 6 - 10 = -4$
$|6 - -10| = |6 + 10| = |16| = 16$