Working with Absolute Value

AL: Algebra Unit 1 Lesson 4

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

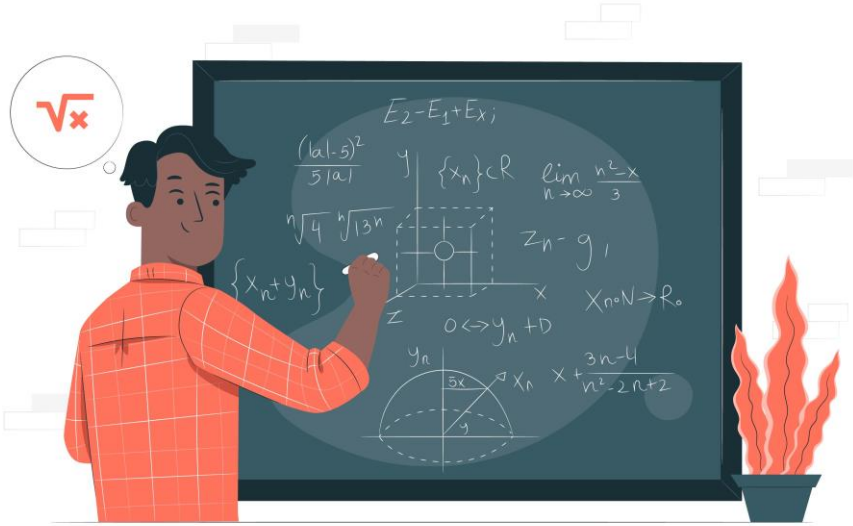


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The symbols for absolute value | | can also act as *grouping symbols*. Perform any operations within the grouping symbols first, just as you would within parentheses.

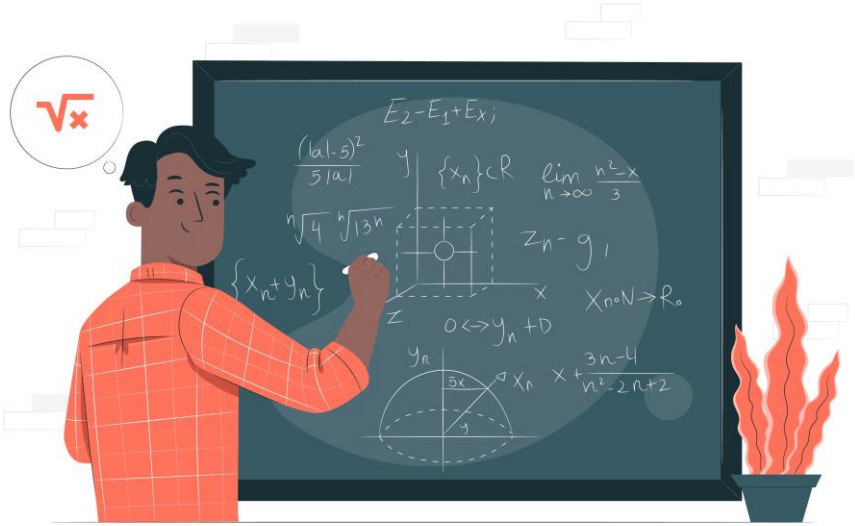


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Look at these examples. Notice the digits are the same in each pair, but the answers are different due to the placement of the absolute value marks.

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

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



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