

# Module 1 - Lesson 1.04: Opposites and Absolute Value

**Directions for Guided Notes** - Complete these notes before each live lesson. You may print or store them digitally. Click on the video links in the right-hand column as they provide the answers needed for the left-hand column.

<b>Notes</b>	Space for NOTES, working out PRACTICE PROBLEMS from the Lesson Book & Video Links ↓
<p><b>Vocabulary</b></p> <p>absolute value: a number's _____ from zero on a number line</p> <p>integers: whole numbers and their _____</p> <p>negative number: any number that is less than and indicates an _____ value, written with the negative _____, such as -7</p> <p>rational number: a real number that can be expressed as a ratio of two _____</p>	<p><a href="#">Extra Practice Problems 1.04</a></p> <p><a href="#">Module 1 Vocab</a></p>
<p><b>What goes on the number line?</b></p> <p>It is important when developing a number line that you place the tick marks the same distance apart. Label the intervals with the form used in the problem or that you understand best. Be sure to label the 0, as it is the value others are based on.</p>	<p>Video: <a href="#">What Goes on a Number Line</a></p>

## Facts about Absolute Value

- The absolute value of any number (except 0) will always be positive. This is because it represents a distance.
- The absolute value of 0 is 0, because it is zero units from itself on the number line.
- The symbol for absolute value is two vertical bars, one on each side of a number. For example,  $|-3|$  is 3.
- If a negative is in front of an absolute value sign, evaluate the absolute value first. Then apply the negative. For example,  $-|-9|$ . Find the  $|-9|$  first. That is 9. Then place the negative that was in front to get an answer of -9.

Video: [Absolute Value](#)

## Plotting, Ordering, and Comparing Rational Numbers

- Convert values to equivalent forms if needed.
- Create a number line with intervals common to the form used.
- Plot the values on the number line.
- Use the number line to help you order the values.
- When ordering from least to greatest or greatest to least, be sure to use commas or inequality symbols. Write items in their original form.

Video: [Plotting, Ordering, and Comparing Tutorial](#)