



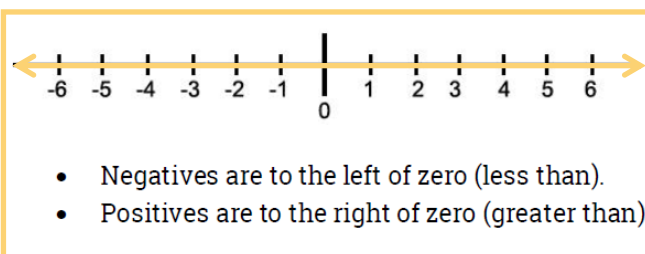
Dear Seventh Grade Families,

In Unit 1, students will work on the following seventh grade Common Core standards in Number System (NS) domain.

7.NS.1a	Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i>
7.NS.1b	Understand $p + q$ as the number located a distance from p in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.
7.NS.1c	Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
7.NS.1d	Apply properties of operations as strategies to add and subtract rational numbers.

Unit 1 Concepts:

- Add & subtract integers
- Add & subtract rational numbers
- Combine opposite quantities to make zero
- Absolute value



Unit 1 Vocabulary:

- Rational number
- Positive/negative number
- Integers
- Additive inverse
- Absolute value

$$(-3) + (3) = 0$$

← Number ← Additive Inverse

5 - 2 is the same as 5 + (-2)
Additive Inverse Property

Ask questions like these to help your seventh grader as a productive mathematical thinker:

- What is a rational number? How is it different from an integer?
- How are -12 and $+12$ similar? How are they different?
- Explain why combining opposite quantities results in zero.
- When you add or subtract rational numbers, how can you tell if your answer makes sense?
- Which strategy have you found to be the most efficient? Why?
- What are some real-world examples of adding and subtracting rational numbers?

Need a review? Check out our lesson videos on-line!

swunmath.com/student-videos

If you don't know the class's special name, ask your child's teacher.

We encourage you to talk with your child daily about what was learned in math class.
Thank you for your support!