

Sixth Grade First Semester Math Curriculum Guide

First Nine Weeks

Engage New York Module 2

The Number System

- 6.NS.A.1 Interpret and compute quotients of fractions
- Solve word problems involving division of fractions by fractions (e.g., by using various strategies, including but not limited to, visual fraction models and equations to represent the problem)
- 6.NS.B.2 Use computational fluency to divide multi-digit numbers using a standard algorithm
- 6.NS.B.3 Use computational fluency to add, subtract, multiply, and divide multi-digit decimals and fractions using a standard algorithm for each operation
- 6.NS.B.4 Find the *greatest common factor* of two whole numbers less than or equal to 100 using prime factorization as well as other methods
- 6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values, explaining the meaning of 0 (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge)
- 6.NS.C.6 Understand a rational number as a point on the number line
- 6.NS.C.7 Understand ordering and *absolute value* of *rational numbers*
- 6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the *coordinate plane*

Second Nine Weeks

Expressions & Equations

Review: The Number System

- 6.EE.A.1 Write and evaluate numerical *expressions* involving whole-number *exponents*
- 6.EE.A.2 Write, read, and evaluate *expressions* in which letters (variables) stand for numbers
- 6.EE.A.3 Apply the properties of operations to generate equivalent *expressions*
- 6.EE.A.4 Identify when two *expressions* are equivalent (i.e., when the two *expressions* name the same number regardless of which value is substituted into them)
- 6.EE.B.5 Understand solving an equation or inequality as a process of answering a question
- 6.EE.B.6 Use variables to represent numbers and write *expressions* when solving a real-world or mathematical problem
- 6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative *rational numbers*
- 6.EE.B.8 Write an inequality of the form $x > c$, $x \geq c$, $x < c$, or $x \leq c$ to represent a constraint or condition
- 6.EE.B.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another