

Seventh Grade First Semester Math Curriculum Guide

First Nine Weeks

Engage New York Module 1 & Module 5

Ratios & Proportions/Statistics & Probability

- 7.SP.A.1 Generalization about a population & Random sampling
- 7.SP.A.2 Use data from a random sample
- 7.SP.B.3 Draw conclusions about the degree of overlap
- 7.SP.B.4 Draw informal comparative inferences about two populations using measures of center and measures of variability for numerical data from random samples
- 7.SP.B.5 Understand that the probability of a chance event is a number between 0 and 1
- 7.SP.C.6 Collect data to approximate the probability of a chance event
- 7.SP.C.7 Develop a probability model and use it to find probabilities of events
- 7.SP.C.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation
- 7.RP.A.2 Recognize and represent proportional relationships between quantities

Second Nine Weeks

Module 2 & Module 3

Rational Numbers & Expressions/Equations

- 7.NS.A.1 Apply and extend previous understandings of addition and subtraction to add and subtract *rational numbers*
 - 7.NS.A.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide *rational numbers*
 - 7.NS.A.3 Solve real-world and mathematical problems involving the four operations with *rational numbers*, including but not limited to *complex fractions*
 - 7.EE.A.1 Apply properties of operations as strategies to add, subtract, expand, and factor linear expressions with rational coefficients
 - 7.EE.A.2 Understand how the quantities in a problem are related by rewriting an expression in different forms
- For example: $a + 0.05a = 1.05a$ means that 'increase by 5%' is the same as 'multiply by 1.05' or the perimeter of a square with side length s can be written as $s+s+s+s$ or $4s$.
- 7.EE.B.3 Solve multi-step, real-life, and mathematical problems posed with positive and negative *rational numbers* in any form using tools strategically
 - 7.EE.B.4 Use variables to represent quantities in a real-world or mathematical problem
 - Construct simple equations and inequalities to solve problems by reasoning about the quantities