

MATH 7 (PREVIEW) SYLLABUS

COURSE DESCRIPTION

Math 7 Preview focuses on the ratios and proportion, number system, and expressions and equations strand of the New Jersey Student Learning Standards for Grade 7. Instructional methods include whole class instruction, individualized instruction, and cooperative group learning. Students will extend their learning of expressions, equations, and inequalities to solve problems, graph solution sets, and interpret solutions in the context of problems.

Students will utilize the Free Online Access Student Edition of the Big Ideas Math - Grade 7 textbook (ISBN #978-1-64208-629-4), located at tinyurl.com/MLBigIdeas as well as a TI-34 scientific calculator. The Mountain Lakes Summer Academy does not provide calculators.

WEEK 1

Unit 1 - Rates, Ratios, & Proportions

NJSLS: 7.RP.A.1, 7.RP.A.2, 7.RP.A.3

- Calculate and Apply Unit Rates
- Solve Proportions using Cross Products
- Applications of Proportions

WEEK 2

Unit 2 - Rational Numbers & Expressions

NJSLS: 7.EE.A.1, 7.EE.A.2, 7.EE.B.3, 7.NS.A.1, 7.NS.A.2, 7.NS.A.3

- Perform Operations with Rational Numbers
- Write Expressions
- Evaluate Expressions
- Simplify Expressions using Properties

WEEK 3

Unit 3 - Equations & Inequalities

NJSLS: 7.RP.A.1, 7.RP.A.2, 7.RP.A.3

- Solve One-Step and Two-Step Equations
- Solve One-Step and Two-Step Inequalities
- Solve Real World Problems by Writing Equations or Inequalities

WEEK 4

Unit 4 - Geometry & Probability

NJSLS: 7.G.B.6, 7.SP.C.5, 7.SP.C.7, 7.SP.C.8

- Calculate Surface Area and Volume of Three-Dimensional Objects
- Calculate Probability of Simple and Compound Events