

## **Russian Math Tutors Pre-Algebra Summer Course**

Course Description: Students will become familiar with the basic concepts of Pre-Algebra in a step-by-step approach and apply these concepts as needed to mathematical problems. Students will also meet the standards set for learning Pre-Algebra in Illinois.

Standards: Numbers and Operations, Algebra, Geometry, Measurement, Data Analysis and Probability, Problem Solving, Reasoning and Proof, Communication, Connections, & Representation.

### Objectives:

- 1) Algebra and Whole Numbers
- 2) Using Decimals
- 3) Number Theory
- 4) Rational Numbers and Fractions
- 5) Basic Operations and Rational Expressions
- 6) Ratios, Proportions, and Percents
- 7) Integers
- 8) Exponents, Square Roots, and the Pythagorean Theorem
- 9) Equations from Geometry
- 10) Graphing
- 11) Geometry
- 12) Data, Statistics, and Probability