

KMS Connected Mathematics Program

Grade 7

Math

The goal of the math curriculum is for all students to communicate proficiently in mathematics. The curriculum is structured around mathematical concepts, processes, ways of thinking, skills, and problem solving. Mathematical concepts are embedded in the context of interesting problems through real applications, or mathematical situations. Students explore a series of connected problems, and develop skill and understanding of mathematical ideas.

Students involved in the 7th Grade Math class will have an opportunity to complete an Algebra course in 8th Grade based on criteria reviewed at the end of a student's 7th grade year. The criterion includes a review of standardized testing data and cognitive and mathematical aptitude assessments. Teachers also provide information regarding classroom participation, content understanding and mathematical skills and ability demonstrated in class.

UNIT TITLES

CONCEPTS COVERED

Stretching and Shrinking

Similarity-Similar figures; scale factors; side length ratios; basic similarity transformations and their algebraic rules

Comparing and Scaling

Ratio, Proportion, and Percent-Rates and ratios; making comparisons; proportional reasoning; solving proportions

Accentuate the Negative

Positive and Negative Numbers-Understanding and modeling positive and negative integers and rational numbers; operations; order of operations; distributive property; four-quadrant graphing

Moving Straight Ahead

Linear Relationships-Recognize and represent linear relationships in tables, graphs, words, and symbols; solve linear equations; slope

Filling and Wrapping

Three-Dimensional Measurement-Spatial visualization, volume and surface area of various solids, volume and surface area relationship

What Do You Expect

Probability and Expected Value-Expected value, probabilities of two-stage outcomes