PRMS Mathematics Seventh Grade Course Descriptions

<u>Math 7</u>

Math 7 is an introductory course in which the students will develop a foundation of algebraic skills. Topics will be covered in more detail to provide a better understanding of the concepts. The course content includes, but is not limited to:

- Integers and rational numbers
- Solving equations and inequalities
- Ratios, rates, and proportions
- Percents
- Geometry and area
- Surface area and volume
- Data analysis and probability
- Problem solving

Pre-Algebra

Pre-Algebra is an intermediate course in which the students will develop a foundation of algebraic skills. The course content includes, but is not limited to:

- Real numbers
- Solving equations and inequalities
- Ratios, rates, and proportions
- Percents
- Introduction to functions
- Graphing linear functions
- Introduction to systems of linear equations
- Exponents
- Transformations
- Geometry and measurement
- Data analysis and probability
- Problem solving

Pre-Algebra (Accelerated)

Pre-Algebra (Accelerated) is a fast-paced course in which students will develop a deep understanding of algebraic concepts. The course content includes, but is not limited to:

- Real numbers
- Solving equations and inequalities
- Ratios, rates, and proportions
- Percents
- Linear functions and their graphs
- Systems of linear equations
- Exponents
- Transformations
- Geometry and measurement
- Data analysis and probability
- Problem solving

<u>Algebra 7</u>

Algebra 7 is an accelerated course intended for students who are capable of a more challenging approach to Algebra. Strong emphasis is placed upon the development and understanding of algebraic skills and their use with respect to generalization, application and problem solving. The course content includes, but is not limited to:

- Variables, function patterns and graphs
- Real numbers
- Solving equations and inequalities
- Functions
- Linear equations and their graphs
- Systems of equations and inequalities
- Exponents and exponential functions
- Polynomials and factoring
- Quadratic equations and functions
- Rational expressions and functions
- Radical expressions and equations
- Data analysis and probability
- Problem solving