



Capital School District Math Curriculum College Prep Algebra 1

College Prep Algebra 1 will introduce students to the terms and principles of Algebra. The course will include an in-depth study of solving linear and quadratic equations, solving linear systems and solving linear inequalities and systems. Students will also study sequences and the comparison of functions (linear, quadratic and exponential). Students will use Algebra to model practical applications.

Marking Period 1

- Solving equations and inequalities
- Solving literal equations
- Graphing functions
- Graphing, modeling and construction arithmetic sequences

Marking Period 2

- Graphing linear functions using various methods
- Constructing the equation of a linear function
- Graphing and solving inequalities
- Data distributions (histogram, box plot and normal)
- Fitting data

Marking Period 3

- Solving systems of equations and inequalities
- Piecewise functions
- Solving and graphing absolute value
- Converting from radical expressions to ones with rational exponents
- Geometric sequences
- Exponential functions
- Comparing linear and exponential functions

Marking Period 4

- Adding, subtracting and multiplying polynomials
- Graphing quadratics and finding their attributes
- Solve quadratics by factoring, square root, complete the square and quadratic formula
- Comparing linear, quadratic and exponential functions