Algebra II CP Curriculum

Prerequisite: Algebra 1 CP

The College Prep Algebra II is a continuation of the Algebra I curriculum that expands on previously taught skill base and explores new topics. The curriculum has been developed in order to provide a foundation of mathematical concepts and skills students require for success in future courses as well as preparing them for college-level work. The instructional units are aligned with the Pennsylvania Common Core. By the end of the Algebra II curriculum, students will meet the following standards:

Algebra Review
This unit is a review of basic Algebra concepts that help prepare students for new concepts. Topics consist of writing equations in slope-intercept, graphing linear equations/inequalities, lines of best fit, solving absolute value equations/inequalities, and systems of equations.

Quadratic Functions
This unit will cover all concepts of quadratic functions. Topics consist of graphing quadratics from vertex and standard form, factoring quadratics, finding the zeros and roots of functions, solving quadratics using square roots, complex numbers and roots, the quadratic formula, solving quadratic equations, and operations with complex numbers.

Polynomials
This unit expands on students' previous knowledge of polynomials and covers topics such as adding, subtracting, and multiply polynomials, dividing polynomials, factoring polynomials, and solving polynomials by factoring.

Logarithmic and Exponential Functions
This unit covers linear functions and consists of the topics growth and decay equations, inverses, logarithmic functions, properties of logarithms, exponential and logarithmic equations, and natural logarithms.

Rational Functions
This unit will cover the topics of direct, indirect, and joint variations, multiplying and dividing rational expressions, adding and subtracting rational expressions, solving rational equations, radical expressions, rational exponents, solving radical equations.

Probability
This unit will expand on previous probability concepts and cover topics of permutations, combinations, theoretical and experimental probability, independent and dependent events, compound events.

Sequences and Series
This unit will cover the topics of introductions to sequences, series and summation notation, arithmetic sequences, and geometric

Next Math Class in sequence to take: Geometry CP