

Elgin Public Schools
Mathematics Department
Miss Johnson; Instructor

Algebra 2

Algebra 2 is a review and a continuation of the solving and simplification of equations and algebraic expressions. It allows the student to extend the knowledge of operations on real numbers, solving equations and inequalities, graphing techniques, solving systems of linear equations, applying functions, problem solving techniques, operations on rational expressions, utilizing radicals and quadratic functions, and the application of exponential and logarithmic functions. The introduction of conic sections, trigonometric functions, sequences and series are also discussed.

Geometry

Geometry is the mathematical study of space. It includes definitions of necessary terms concerning Geometry, the study of the properties of different shapes, application of their properties to real life situations, the concepts of congruence, similarity, right triangle measure, parallel lines, area, and volume will be explored, and demonstrate formal deductive and inductive reasoning. The study of points, lines, and their relationships will be incorporated using a computer throughout the year.

Math 8

This class's real name is Pre-Algebra. It covers classification of real numbers, applying the order of operations to solving problems, operations of integers, etc., utilizing one/two dimensional coordinate systems, performing transformations. It includes some Geometry skills and finishes the year with sections of probability and statistics. The goal of Math 8 is to make Algebra I (freshman) as easy as possible.

Sr. Math (dual credit)

This class will be a dual-credit class with both high school and college credits earned at one time. Math 2000 is a study of functions, derivatives of algebraic forms, applications of differentiation, anti-derivatives, limits, integration, and elements of analytic geometry such as straight lines, conics and graph sketching.

Algebra I

Algebra I covers a variety of essential skills necessary for problem solving. Included are chapters about: data and graphs; variables, expressions, and real numbers; linear equations; functions and graphs; linear Inequalities; linear functions and graphs; systems of linear equations or linear inequalities; absolute value and the real number system; quadratic functions and equations; polynomials and exponents; polynomials and factoring; geometry and radical expressions; and rational expressions.

Algebra A

Algebra A covers the same material that Algebra I covers but at a slower rate (total time need is 2 school years). This class is not available to the general school population but special education teachers and our guidance counselor can assign students to this class.

Math 7

Math 7 finishes elementary math (arithmetic) and introduces students to pre-algebra. Topics covered are: operations on decimals, fractions, percents, mixed numbers, whole numbers and integers, equivalencies between different types of numbers, writing numbers in different forms, measuring and convert customary units/metric units, simple statistics, some Geometric concepts, some simple transformations and using formulas to calculate area and perimeter.

Statistics (dual credit)

This semester class is a study of the branch of mathematics that collects, organizes, and analyzes numerical data.