

HIGH SCHOOL MATH INSTRUCTION

The high school student and the high school educator have quite a few more challenges to consider. For one, the average size, and therefore the student population, is typically much larger. A larger population means students spend even less time with teachers one-on-one. Students are also subject to a heavier workload, which could leave them to focus on subjects they find enjoyable or excel in, but steer clear of the others. Also, the latter half of the high school experience is devoted to college preparation.

Overcoming those obstacles associated with particular subjects can be the difference between students choosing to continue their academic career, or finishing school altogether. Getting high school students to **show up, be engaged, and prove to themselves that they are capable of developing conceptual understanding** is critical.

While we often organize by course subject, as seen below, **we provide instruction on all academic standards.**

Algebra I & II

Geometry

Precalculus

Calculus

Exam Review Packages

AB/BC Calculus

Statistics

SAT Review

ACT Review

GRE Review

For a deeper dive into what elements your student will see in each course, check out the following page::



CONCEPTS COVERED

See something you struggle with? Let's get started!

Algebra I

- Sequences
- Linear and Exponential Functions
- Features of Functions
- Equations and Inequalities
- Systems of Equations and Inequalities
- Quadratic Functions
- Structures of Quadratic Expressions
- Modeling Data
 - Extend the properties of exponents to rational exponents
 - Use properties of rational and irrational numbers

Algebra II

- Number Systems and Operations
- Polynomial Functions
- Rational Functions and Expressions
- Modeling Periodic Behavior
- Trigonometric Functions, Equations, and Identities
- Modeling with Functions
- Statistics
- Matrices

Geometry

- Transformations and Symmetry
- Congruence, Construction, and Proof
- Geometric Figures
- Similarity and Right Trigonometry
- Circles: A Geometric Perspective
- Measuring Circles, Angles, and Shapes
- Algebraic Expressions in Geometry
- Modeling with Geometry
- Probability

Precalculus

- Area Under a Curve
- Polynomial and Rational Functions
- Exponentials and Logarithms
- Triangles and Vectors
- Limits and Rates
- Extending Periodic Functions
- Matrices
- Conics and Parametric Functions
- Polar Functions and Complex Numbers
- Series and Statistics

Calculus

- Rates, Sums, Limits, and Continuity
- Slope and Curve Analysis
- The Fundamental Theorem of Calculus
- Derivative Tools and Applications
- Related Rates
- Integration
- Volume
- Series
- Polar and Parametric Functions
- Error

Don't see a standard? We have a curriculum team that can help meet any needs up through Calculus!