



Summer Classes - Help your student catch-up and prepare for the next school year.

Algebra I

This class will cover the following topics: Solving equations and inequalities Systems of equations (linear, quadratic...) Functions	Absolute value and piecewise functions Exponents and radicals Quadratic functions and equations Sequences
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Emphasis will be on working problems and there will be homework assignments for students to complete to ensure their understanding of the topics.

Algebra II

Polynomial factorization Polynomial division Transformations of functions Rational functions	Logarithms Exponential models Trigonometry Modelling
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Emphasis will be on working problems and there will be homework assignments for students to complete to ensure their understanding of the topics.

Geometry

Transformation properties and proofs Congruence Similarity Right angles and Trigonometry	Non-right angles and Trigonometry Analytic geometry Conic sections Circles Solid geometry
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Emphasis will be on working problems and there will be homework assignments for students to complete to ensure their understanding of the topics.

Python

This class will cover Setting up the Python environment – using VS Code and Jupyter Notebooks. We will look at how to use Python to complete many useful tasks involving data structures, classes, and methods. Some of the more important libraries such as numpy, pandas, matplotlib and PyGame will be investigated.



Chemistry

Introduction to the Atom Introduction to the Periodic Table Ions and Compounds Names and Formulas of Ionic Compounds Moles and Molar Mass Isotopes Pure Substances	Mixtures Balancing Chemical Equations Limiting Reagent Stoichiometry Physical and Chemical changes Types of Chemical Bonds Ideal Gas Equation Chemical Equilibrium Acids, Bases and pH
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Emphasis will be on the math of Chemistry (no labs) and there will be homework assignments for students to complete to ensure their understanding of the topics. An understanding of basic algebra is preferred for this class.

Pre-Calculus

Graphs Functions and their Graphs Linear and Quadratic Functions Polynomial and Rational Functions	Exponential and Logarithmic Functions Trigonometric Functions Systems of Equations and Inequalities
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Emphasis will be on working problems and there will be homework assignments for students to complete to ensure their understanding of the topics.

Physics

One-dimensional motion Two-dimensional motion Forces and Newton's laws of motion Centripetal force and gravitation Thermodynamics	Work and energy Impacts and linear momentum Torque and angular momentum Circuits Optics
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Emphasis will be on working problems and there will be homework assignments for students to complete to ensure their understanding of the topics. An understanding of basic algebra is preferred for this class.