

## Grades 6-8

- Whole Numbers
- Add Whole Numbers
- Subtract Whole Numbers
- The Meaning of Multiplication
- The Meaning of Division
- Fractions
- Decimals
- Algebra & Functions
- Geometry Basic Concepts
- 2D Shapes
- 3D Shapes
- Figure Properties
- Area
- Volume
- Measurement Benchmarks & Nonstandard Units
- Time
- Money
- Customary Units
- Metric Units
- Statistics & Probability Data
- Types of Graphs
- Data Analysis
- Probability
- Reasoning

## Algebra 1

- Introduction to Algebra
- Basic Concepts
- Equations and Solving an Equation
- Linear Equations
- Non-Linear Equations
- Inequalities, Axioms, and Properties of Inequalities
- Absolute Value Equations and Inequalities
- Analytic Geometry
- Functions and Variables
- Reasoning and Proof
- Introduction to Statistics

## Algebra 2

- Introduction to Algebra Basic Concepts
- Linear Equations with One Variable Review
- Linear Equations with Two Variables Review
- Linear Equations with Three Variables
- Quadratics with One Variable
- Quadratic Systems
- Inequalities, Axioms, and Properties of Inequalities Review
- Conic Sections
- Exponential & Logarithmic Functions
- Trigonometry Relations Review
- Trigonometry Review of Functions
- Functions of Acute Angles
- Functions of General Angles
- Law of Sines
- Law of Cosines
- Geometry of Complex Numbers
- Sequence and Series
- Additional Algebra 2 Topics

## Plane Geometry

- Plane Geometry
- Types of Lines
- Angles
- Pairs of Angles
- Symmetry
- Triangles
- Polygons
- Quantitative Properties
- Circles
- The 3D World

## Solid Geometry

- Plane
- Two Lines in Space
- A Line and a Plane in Space
- Two Planes in Space
- Prism
- Pyramid
- Right Cylinder
- Right Cone
- Sphere
- Surface Areas of Solid Figures
- Volumes of Solid Figures
- Polyhedral Angles & Regular Polyhedrons
- The Journey Ahead

## Trigonometry

- Angles
- Coordinate System and 4 Quadrants
- Triangles by Sides
- Triangles by Angles
- Congruence
- Similarity
- Functions of Acute Angles
- Functions of General Angles
- Tables of Trigonometric Functions
- Trigonometry of Triangles
- Graphs of Trigonometric Functions
- Trigonometric Identities
- Vectors
- Polar Coordinates and Complex Numbers
- Inverse Functions
- Spherical Trigonometry