

Algebra 1

1. Introduction to algebra
 - a. Algebraic expressions
 - b. Grouping symbols
 - c. Factors, coefficients, exponents
 - d. Order of operations
 - e. Commutative and associative properties
 - f. Distributive properties
 - g. Solution sets
2. Real number system
3. Equations and applications
4. Inequalities and absolute value
5. Powers and polynomials
6. Factoring polynomials
7. Rational expressions
8. Functions
9. Linear equations
10. Variation functions
11. Quadratic equations
12. Statistics
13. Probability

Geometry

1. Reasoning and proof
2. Lines, angles, and planes
3. Congruence
4. Triangles
5. Quadrilaterals
6. Transformations
7. Surface area and volume
8. Circles
9. Analytic geometry

Trigonometry

1. Introduction
 - a. Radians and degrees
 - b. Arc length
 - c. Quadrants
2. Trigonometric ratios
 - a. Sin, cos, tan
 - b. Reciprocal trig ratios
3. Trigonometry in a right triangle
 - a. Ratios
 - b. Solve a right triangle
 - c. Area of right triangle
 - d. Special right triangle
4. Trigonometry in a general triangle
 - a. Law of sines
 - b. Law of cosines
5. Trigonometric functions
 - a. Unit circle intro
 - b. Sin, cos, tan functions
 - c. Reciprocal trig functions
 - d. Inverse trig functions
 - e. Graphing trig functions
 - f. Symmetry and periodicity of trig functions
6. Trigonometric identities
 - a. Reciprocal and quotient
 - b. Pythagorean
 - c. Addition, subtraction, double angle and half-angle
 - d. Cofunction
 - e. Symmetry and periodicity

Algebra 2

1. Linear and polynomial functions
2. Systems of equations and inequalities
3. Matrices
4. Complex numbers
5. Rational and radical functions
6. Logarithmic and exponential functions
7. Conics
8. Sequences and series
9. Probability and statistics
10. Vectors

Calculus 1

1. Functions and models
2. Limits
3. Derivatives
4. Applications of derivatives
5. Integration