



St. John's Academy Math Course Progression

Arithmetic and Intro to Algebra

- Number Types
- Number Forms
- Number Theory
- Operations
- Number Line
- Coordinate Plane
- 2D Geometry (Polygons)
- 3D Geometry (Solids)
- Measurements and Data
- Ratio, Rate, Proportions
- Charts and Graphs
- Probabilities
- Patterns and Sequences
- Data Analysis
- Financial Literacy

Algebra 1

- Linear Equations
- Systems of Linear Equations
- Quadratic Equations
- Linear Inequalities
- Graphical Solutions of Equations and Inequalities
- Creating and Interpreting Equalities from Real- World Scenarios
- Functions
- Sequences
- Exponential Laws
- Radicals
- Absolute Value
- Statistics

Algebra II

- Functions and Relations
- Composition and Inverses of Functions
- Transformation of Numbers
- Complex Numbers
- Quadratic Function
- Cubic Function
- Radial Function
- Exponential Function
- Logarithms
- Sequences and Series
- Statistics

Geometry

- Foundations
- Vocabulary
- Distance and Midpoint
- Angle and Segment Relation
- Constructions
- Introduction to Proofs
- Transformations and Congruence
- Coordinate Plane Geometry
- Similar Figures
- Quadrilaterals
- Polygons
- Circles
- Solids and Modeling

Pre-Calculus

- Polynomial Functions
- Rational Functions
- Exponential Functions
- Logarithmic Functions
- Trigonometry
- Degree and Radian Measures
- Trigonometric Functions of Special Angles
- Trigonometric Identities of Equations
- Solving Triangles
- Polar Coordinates
- Conic Sections and Their Equations
- Parabola
- Ellipse
- Hyperbola
- Matrices

Statistics

- Organizing Data
- Exploring Data
- Normal Distribution
- Examining Data
- Scatter Plots
- Correlation
- Least Squares Regression
- Relations in Line
- Categorical Data
- Design of a Study
- Sampling, Surveying, and Experimenting
- Simulating Experiments
- Probability of Random Variables
- Binomial Distribution
- Geometric Distribution
- Sampling Positive and Negative
- Inference
- Estimating with Confidence
- Testing Hypothesis
- Inference for Regression
- Inference for Categorical Data

