

Math 11

Sunrise Edition

Algebra 2

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
- Sets - Order of Operations - Real Number Properties - Exponents - Equations - Identities and Contradictions; Literal Equations - Solving and Graphing Inequalities - Graphing Linear Equations - Compound Inequalities - Multiplying Polynomials - The Slope Formula - Writing Linear Equations	- Factoring Polynomials - Systems of Equations - Solving Absolute Value Equations - Graphing Linear Inequalities - Simplifying Radicals - Solving Systems of Equations by Elimination - Multiplying and Dividing Radicals - Graphing Two-Variable Linear Inequalities - Quadratic Equations - Imaginary Numbers - Linear Programming - Completing the Square	- Principal Parts of Verbs - Contractions - Factoring By Grouping - Dividing Polynomials by Long Division - Introduction to Functions - Graphing Quadratic Functions - Synthetic Division - The Quadratic Formula - The Discriminant of the Quadratic Formula - Translated Quadratic Functions - Three-Variable Systems - Combining Complex Numbers - Operations with Functions - Reducing Rational Expressions	- Factoring Completely - Factoring a Difference or Sum of Cubes - Rationalizing Radical Denominators - Completing the Square of a Quadratic Function - Dividing Complex Numbers - Finding the LCM to Add and Subtract Rational Expressions - Rationalizing Binomial Denominators Containing Radicals - Graphing Quadratic Function Inequalities - Polynomial Equations and Polynomial Functions - Complex Rational Expressions - Graphing Polynomial Functions - Rational Equations	- The Pythagorean Theorem - Matrices - The Distance and Midpoint Formulas - Radical Equations - Multiplication of Two Matrices - Trigonometric Ratios - Equations with Multiple Radicals - The Fundamental Principle of Counting - Matrix Determinants - Fractional Exponents - Graphing Simple Rational Functions - Solving Right Triangles
Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
- Simplifying Complex Radical Expressions - Composite Functions - Conic Sections and Analytic Geometry: Circles - Arithmetic Sequences - Permutations - Trigonometric Ratios of Angles Greater Than 90° - Geometric Sequences - Permutations of Partial Sets - Statistics: Measures of Center - Completing the Square for Circles - Measures of Variability: Range and Standard Deviation - Graphing Linear Rational Functions in General Form	- Cramer's Rule - Finding the nth Term of an Arithmetic Sequence - Combinations - Radian Measure - Applications of Composite Functions - Conic Sections and Analytic Geometry: Parabolas - Finding the nth Term of a Geometric Sequence - Probability - Exponential Functions - Logarithms - Multiple Probabilities - Radical Functions	- The Gauss-Jordan Method of Solving Two Equation Systems - Arithmetic Series - Graphing a Sine Function - Common and Natural Logarithms - Translated Exponential Functions - Conic Sections and Analytic Geometry: Translated Parabolas - The Cosine Function - Geometric Series - Conic Sections and Analytic Geometry: Horizontal Parabolas - The Gauss-Jordan Method of Solving Three Equation Systems - Histograms and Normal Distributions - Convergent Infinite Geometric Series	- Conic Sections and Analytic Geometry: Ellipses - Properties of Logarithms - Area of Triangles - Change-of-Base Property - The Tangent Function - Determining the Foci of an Ellipse - The Law of Sines - The Exponential Growth or Decay Formula - Exponential Equations - Conic Sections and Analytic Geometry: Translated Ellipses - Probability of Compound Events - Solving Exponential Equations with Unlike Bases	- The Law of Sines and the Ambiguous Case - Part 1 - Conic Sections and Analytic Geometry: Hyperbolas - Box and Whisker Plots - Data Relationships, Scatter Plots, and Best Fit Lines - Summation Notation - Bacterial Growth and Radioactive Decay: Part 2 - Changing a Repeating Decimal to its Rational Form - The Law of Sines and the Ambiguous Case - Part 2 - Measuring Correlation Using r - The Law of Cosines - Conic Sections and Analytic Geometry: Translated Hyperbolas - Linear Regression