

**REDBANK VALLEY SCHOOL DISTRICT
MATHEMATICS CURRICULUM MAP**

ALGEBRA II GRADES 10-12

Chapter 1-2	Chapter 2-3	Chapter 4	Chapter 5	Chapter 5-6	Chapter 11	Chapter 6-7	Chapter 7-8	Chapter 9
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Scatter Plots; Trend Lines; Correlation; Functions & Function Notation; Basic Graphs & their Translation; Basic Counting Methods; Categories of Numbers; Slope & its Interpretation; Human Graphs; Slope Song	Comparison of Direct Variation & Linear Functions; Graphing One Variable Equations & Inequalities; Graphing Inequalities in Two Variables; Experimental vs Theoretical Probability; Simulations Using Random Number Tables; Organizing Data in Matrices; Matrix Operations; Using Matrices for Geometric Transformation, Networks & Solving Equations; Coding & Decoding a Message	Solving Linear Systems by Graphing, Algebraic Methods, Substitution, Elimination, Matrices; Graphing in 3 Dimensions; Solving Systems of Three or More Equations	Comparing Linear & Quadratic Models; Finding Maximum or Minimum of Quadratic Functions; Identify Properties & Features of Parabolas; Learn to Complete the Square to use Vertex Form of Parabola Equation; Solve Quadratic Equations by Factoring, by Completing the Square, by the Quadratic Formula; Quadratic Formula Song	Inverse Functions (Square Root) Complex Numbers; Using Power Functions & Inverses; Even & Odd Functions; End Behavior of Polynomial Functions; Relating the Algebraic & Graphic Features of Polynomials; Solving Polynomial Functions; Polynomial Long Division; Synthetic Division	Make Probability Distributions; Use Probability Distribution to Conduct Simulations; Use Tree Diagrams & Formulas to Find Conditional Probability; Quantify Data by Using Box-and- Whisker Plots; Define Standard Deviation & Use to Compare Sets of Data; Study Standard Normal Curve & Use to Find Probabilities	Pascal's Triangle; Using the Binomial Theorem for Expansion & for Probability; Combinations; Modeling Exponential Growth & Delay; Graphing Exponential Functions; Using Exponential Functions for Interest, Growth & Decay; Introduction to "e", Introduction to Logarithms	Properties of Logarithms; Solving Equations by Using Logarithms; Identify & Solve Inverse Variation Problems; Graphing Hyperbolas; Work with Rational Expressions; Add/Subtract Multiply/Divide; Solve Rational Equations; Probability of Mutually Exclusive and Independent Events	Introduce Periodic Functions; Find Period, Maximum & Minimum; Define & Use Radian Measure of Angles; Use Unit Circle to Define Sine & Cosine Functions; Define Tangent Function; Use Trig Functions to Solve Triangles; Law of Sins; Law of Cosines