

Algebra 2 Subject Group Overview - Semester 1

Unit Name	Inferences & Conclusions from Data	Quadratics Revisited	Operations with Polynomials	Polynomial Functions
Time Frame	4 Weeks	6 Weeks	4 Weeks	4 Weeks
Standards/IB Topics	MGSE9-12.S.ID.2, 4 MGSE9-12.S.IC.1, 2, 3, 4, 5, 6	MGSE9-12.N.CN.1, 2, 3, 7 MGSE9-12.A.REI.4,4b *MGSE9-12.N.RN.1, 2 - moved to radical function unit MGSE9-12.N.CN.8 moved to Unit 2	MGSE9-12.A.APR.1, 4, 5, 6 MGSE9-12.F.BF.1, 1b, 1c MGSE9-12.N.CN.8 *MGSE9-12.F.BF.4, 4a, 4b, 4c – moved to exponential/log unit	MGSE9-12.N.CN.9 MGSE9-12.A.SSE.1, 1a, 1b, 2 MGSE9-12.A.APR.2, 3 MGSE9-12.F.IF.4, 7, 7c
Content Specific Information	Topics: Measures of Spread – Variance, Standard Deviation The Normal Curve Empirical Rule Surveys and Studies	Topics: Factoring Review Solving Quadratic Equations by Factoring Complex and Imaginary Numbers Complex Number Operations Solving Quadratic Equations by Taking the Square Roots Solving Quadratic Equations by Completing the Square Solving Quadratic Equations by the Quadratic Formula	Topics: 3.2, 5.5, 3.3 Add/Subtract/Multiply Polynomials Add/Subtract/Multiply Functions Composition of Functions Identities Binomial Theorem	Topics: 3.1, 3.4, 3.5, 3.6, 3.7 Intro to Polynomial Graphs Basic Characteristics Long and Synthetic Division Zeros of a Polynomial Theorems about Roots and Polynomial Equations Odd/Even Functions
Common Assessments / Major Projects	Common Test Common Quiz	Common Test Common Quiz	Common Test Common Quiz	Common Test Common Quiz
Resources	Savvas enVision Textbook DOE Curriculum Frameworks	Savvas enVision Textbook DOE Curriculum Frameworks	Savvas enVision Textbook DOE Curriculum Frameworks	Savvas enVision Textbook DOE Curriculum Frameworks

Algebra 2 Subject Group Overview - Semester 2

Unit Name	Operations with Rational Expressions	Rational and Radical Relationships	Exponential & Logarithms
Time Frame	4 Weeks	7 weeks	7 weeks
Standards/ IB Topics	MGSE9-12.A.APR.7	MGSE9-12.A.CED.1, 2 MGSE9-12.A.REI.2 MGSE9-12.F.IF.4, 5, 7, 7b, 7d MGSE9-12.N.RN.1, 2	MGSE9-12.A.SSE.3, 3c MGSE9-12.F.IF.7, 7e, 8, 8b MGSE9-12.F.BF. 4, 4a, 4b, 4c, 5 MGSE9-12.F.LE.4
Content Specific Information	Topics: Simplify Rational Expressions Domain Restrictions Multiply/Divide Rational Expressions Add/Subtract Rational Expressions	Graphing Rational Functions Domain/Range Asymptotes/Holes Intercepts End Behavior Solving Rational Equations Modeling with Rational Functions Roots and Rational Exponents Graphing Radical Functions – Transformations Characteristics of Rational Functions Solving Rational Equations Inverse Functions	Graphing Exponential Functions – Transformations Characteristics of Exponential Functions Modeling with Exponential Functions Transforming between Exponential and Logarithmic Form Solving Simple Log and Exponential Equations Graphing Logarithmic Functions Characteristics of Logarithmic Functions Properties of Log Expressions Solving More Complex Logarithmic and Exponential Equations Geometric Sequences and Series
Common Assessments / Major Projects	Common Quiz	Common Tests: Graphing/Solving Rational Functions Graphing/Solving Radical Functions Common Quizzes	Common Test: Graphing /Solving Exponential Functions Graphing/Solving Logarithmic Functions Common Quizzes
Resources	Savvas enVision Textbook DOE Curriculum Frameworks	Savvas enVision Textbook DOE Curriculum Frameworks	Savvas enVision Textbook DOE Curriculum Frameworks
Course Levels	Marietta City Schools offers Enhanced, Honors, Accelerated, and AP classes to provide differentiated learning experiences for students.		