

Honors Algebra 2 Subject Group Overview - Semester 1

Unit Name	Quadratics Revisited	Operations with Polynomials	Polynomial Functions	Operations with Rational Expressions
Time Frame	6 Weeks	3 Weeks	5 Weeks	2 Weeks
Standards/ IB Topics	MGSE9-12.N.CN.1, 2, 3, 7 MGSE9-12.A.REI.4,4b MGSE9-12.N.RN.1, 2 *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	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	MGSE9-12.A.APR.7
Content Specific Information	Topics: Factoring Review Roots and Rational Exponents 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 Inverse Functions	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	Topics: Simplify Rational Expressions Domain Restrictions Multiply/Divide Rational Expressions Add/Subtract Rational Expressions
Common Assessments / Major Projects	Common Test Common Test (mid unit) Common Quiz	Common Test Common TOTD	Common Test Common TOTD Common Quiz	Common TOTD
Resources	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math

Honors Algebra 2 Subject Group Overview - Semester 2

Unit Name	Rational and Radical Relationships	Exponential & Logarithms	Inferences & Conclusions from Data (DOE Unit 7)	Modeling (DOE Unit 6)
Time Frame	6 weeks	4 weeks	4 Weeks	2 Weeks
Standards/ IB Topics	MGSE9-12.A.CED.1, 2 MGSE9-12.A.REI.2 MGSE9-12.F.IF.4, 5, 7, 7b, 7d	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	MGSE9-12.S.ID.2, 4 MGSE9-12.S.IC.1, 2, 3, 4, 5, 6	MGSE9-12.A.SEE.4 MGSE9-12.A.CED.1, 2, 3, 4 MGSE9-12.A.REI.11 MGSE9-12.F.IF.6, 9 MGSE9-12.F.BF.3
Content Specific Information	Graphing Rational Functions Domain/Range Asymptotes/Holes Intercepts End Behavior Solving Rational Equations Modeling with Rational Functions Graphing Radical Functions – Transformations Characteristics of Rational Functions Solving Rational Equations	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 Inverse Functions	Measures of Spread – Variance, Standard Deviation The Normal Curve Empirical Rule Surveys and Studies	Graphing Absolute Value Functions (Related standard) Piecewise and Step Functions (Related Standard) Literal Equations Average Rate of Change? Sum of finite geometric series?
Common Assessments / Major Projects	Common Tests: Common Quiz Common TOTD Common Test	Common Test	Common Test	Common Task Mini IA exploration
Resources	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math	Savvas enVision Textbook DOE Curriculum Frameworks Khan Academy Delta Math
Course Levels	Marietta City Schools offers Enhanced, Honors, Accelerated, and AP classes to provide differentiated learning experiences for students.			