

Algebra II Scope & Sequence

Tier 3 Curriculum



2015-2016

ORANGE PUBLIC SCHOOLS

OFFICE OF CURRICULUM AND INSTRUCTION

OFFICE OF MATHEMATICS

Algebra II (Tier 3) Curriculum

Scopes and Sequences:

Unit 1: Linear equations and inequalities (21 blocks) – Agile Mind

- * Solving linear equations
- * Problem solving with slope triangles
- * solving linear inequalities

Unit 2: System of linear equations and inequalities (22 blocks)—Agile Mind

- * Formulating and solving systems
- * Building fluency with equation solving
- * Other methods for solving systems

Unit 3: Exponential relationships (18 blocks) – Agile Mind

- * Exponents and exponential models
- * Reasoning with quantities
- * Problem solving with exponential functions

Unit 4: Quadratic functions and equations (35 blocks) – Agile Mind & *Pearson Alg. 2***

- * Quadratic models and equations
- * Polynomial addition and multiplication
- * Factoring and quadratic equations
- **Complex numbers*
- **Modeling with Quadratic Functions (Quadratic Regression)*

Unit 5: Polynomial Functions and Rational Functions (29 blocks) – Pearson Alg.2

- * Polynomial functions
- * Polynomials, Linear Factors, and Zeros
- * Solving Polynomial Equations
- * Polynomial Models in the real World
- * Dividing Polynomials
- * Rational Functions & Expressions
- * Adding and Subtracting Rational Expressions
- * Solving Rational Equations

Unit 6: Radical Functions and Rational Exponents (17 blocks)—Pearson Alg. 2

- * Roots and Radical Expressions
- * Multiplying and Dividing Radical Expressions
- * Binomial Radical Expressions
- * Rational Exponents
- * Solving Square Root and Other Radical Equations
- * function Operations
- * Inverse Relations and Functions

Unit 7: Exponential and Logarithmic Functions (13 blocks) –Pearson Alg. 2

- * Exponential Models
- * Properties of Exponential Functions
- * Logarithmic Functions as Inverses
- * Properties of Logarithmic Equations
- * Natural Logarithms