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