

## Algebra 1 Year at a Glance

# Scope and Sequence 2023-2024

**Please Note:** All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended timeline and sequence to be used voluntarily by teachers for planning purposes. Specific question regarding when content will be addressed in a specific course are best answered by the individual teacher.

### **Course Resources**

#### **Publisher Resource:**

Florida Reveal, McGraw-Hill (Clever – use your active directory; does not support Internet Explorer)

## **Supplemental Resources:**

Khan Academy (Algebra 1; does not support Internet Explorer)

<u>Illustrative Mathematics</u> (Algebra 1; does not support Internet Explorer)

# In Algebra 1, instructional time will emphasize five areas:

- (1) Performing operations with polynomials and radicals, and extending the Laws of Exponents to include rational exponents;
- (2) Extending understanding of functions to linear, quadratic and exponential functions and using them to model and analyze real-world relationships;
- (3) Solving quadratic equations in one variable and systems of linear equations and inequalities in two variables;
- (4) Building functions, identifying their key features and representing them in various ways;
- (5) Representing and interpreting categorical and numerical data with one and two variables.



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Quarter 1 (August 10 – October 13)	Quarter 2 (October 17 – December 21)
Module 1: Writing and Solving Equations Students will write, interpret, and solve equations in real-world contexts. Students will utilize models and visual strategies for engaging in multi-step and absolute value equations.	Module 4: Equations of Linear Functions Students will make use of a variety of forms and representations when modeling and applying equations of linear functions. Instruction includes scatter plots, lines of best fit, and correlation and causation.
Module 2: Graphs and Functions	
Students will explore the meaning of functions and their representations using graphs, tables, equations, and written descriptions. Instruction includes continuity, linear functions, and nonlinear functions.	Module 5: Linear Inequalities  Students extend their understanding of equations to include inequalities. Instruction includes solving and graphing simple, compound, and absolute value inequalities.
Module 3: Linear and Absolute Value Functions Students will build on what they know about linear and absolute value equations in contexts of functions, exploring their graphs, key features, transformations, and applications.	Module 6: Systems of Linear Equations and Inequalities Students explore a variety of strategies for writing, solving, and interpreting systems of equations, including graphing systems and solving systems of inequalities.
Quarter 3 (January 8 – March 8)	Quarter 4 (March 19 – May 24)
Module 7: Exponents and Roots Students will apply properties of exponents in evaluating rational exponents, simplifying radical expressions, and identifying equivalent rational expressions.  Module 8: Exponential Functions	Module 10: Quadratic Functions Students will graph, solve, interpret, and model quadratic functions using a variety of strategies. Instruction includes transformations, factoring, completing the square, and curve fitting.
Students will explore exponential functions, including the	Module 11: Represent and Interpret Data
interpretation of their graphs, writing their equations with and without transformations, and interpreting compound interest.	Students will interpret, analyze, model, and represent univariate and bivariate data using a variety of representations, including frequency tables and box plots.
Module 9: Polynomials	
Students will perform operations with polynomials, including the use of Algebra Tiles for distributive property and factoring.	