

Algebra 1 Curriculum 2025/2026

Unit 1: Solving Equations and Inequalities

- Review of Simplifying Expressions
- One Step and Two Step Equations
- Multi-Step Equations
- Equations with Variables on Both Sides
- Literal Equations
- Solve and Graph One and Two-Step Inequalities
- Solve and Graph Multi-Step Inequalities
- Solve and Graph Inequalities with Variables on Both Sides
- Solve and Graph Compound Inequalities (And and Or)
- Write and Graph Inequality Solutions in Interval Notation

Unit 2: Properties of Functions

- Identifying Functions
- Library of Functions (constant, linear, quadratic, cubic, exponential, absolute value, and piecewise)
- Graphing Functions
- Domain and Range
- Continuous and Discrete Data

Units 3: Linear Equations

- Slope and Rate of Change
- Slope-intercept Form
- Point-slope Form
- Standard Form
- X and Y Intercepts
- Vertical and Horizontal Lines
- Problem Solving

Unit 4: Systems of Linear Equations and Inequalities

- Solve by Graphing
- Solve by Substitution
- Solve by Elimination
- Applying Systems
- Graphing Systems of Linear Inequalities

Semester 1 Final Exam

Unit 5: Statistics

- Dot Plots
- Histograms
- Box Plots
- Two Way Frequency Tables
- Identify Types of Graphs
- Shape, Distribution, and Spread
- Outliers

Unit 6: Exponents and Exponential Functions

- Exponent Rules
- Evaluate Exponential Functions
- Graphing and Writing Exponential Functions
- Exponential Growth and Decay
- Problem Solving with Exponential Functions
- Parent Functions
- Function Notation
- Domain and Range

Unit 7: Polynomials and Factoring

- Adding and Subtracting Polynomials
- Multiplying Polynomials
- Interpret Factored Expressions
- Factoring GCF
- Factoring Guess and Check
- Difference of Squares

Unit 8: Quadratic Functions

- Attributes of Quadratic Functions
- Quadratic Equations and Vertex Form
- Quadratic Functions in Standard Form
- Parent Quadratic Functions
- Compare Function Models
- Function Notation
- Domain and Range

Unit 9: Solving Quadratic Equations

- Solving Quadratic Equations by Factoring
- Solve Quadratic Equations by Graphing
- The Square Root Method
- Completing the Square
- The Quadratic Formula
- Interpret Quadratic Equations
- Modeling Quadratic Equations

Semester 2 Final Exam