

Algebra 1 Part 1 & Part 2

2023 Pacing Guide

Unit	Topic	2023 SOL	Pacing
1st Nine Weeks			
Expressions, Equations, and Functions	<ul style="list-style-type: none"> Variables and Expressions Translate Verbal Expressions Order of Operations Evaluating Expressions Square Roots & Cube Roots Real Numbers and the Number Line Properties of Real Numbers Like Terms & Distributive Property Patterns, Equations, and Graphs 	A.EO.1 A.EO.4	3 weeks
Solving Linear Equations	<ul style="list-style-type: none"> Single Step Equations Multi-Step Equations Solving Equations with Variables on Both Sides Solving Equations and Literal Formulas Solving Proportions 	A.EI.1	3 weeks
Solving Inequalities	<ul style="list-style-type: none"> Graphing Inequalities on a Number Line Single-Step Inequalities Multi-Step Inequalities 	A.EI.1	3 weeks
2nd Nine Weeks			
Linear Functions	<ul style="list-style-type: none"> Rate of Change and Slope Slope Intercept Form Point-Slope Form Standard Form Parallel and Perpendicular Lines 	A.F.1	4 weeks
Systems of Equations & Inequalities	<ul style="list-style-type: none"> Systems of Equations with Substitution Systems of Equations with Elimination Systems of Equations with Graphing Linear Inequalities Systems with Linear Inequalities 	A.EI.2 A.EI.1	3 weeks
Functions	<ul style="list-style-type: none"> Patterns and Linear Functions 	A.F.1 A.F.2	2 weeks

	<ul style="list-style-type: none"> Formalizing Relations and Functions Transformation of Linear Parent Functions 		
3rd Nine Weeks			
Exponents and Exponential Functions	<ul style="list-style-type: none"> Zero and Negative Exponents Scientific Notation Multiplying Powers With the Same Base More Multiplication Properties of Exponents Divisions Properties of Exponents Key Features of Exponential Functions 	A.EO.3 A.F.2	3 weeks
Polynomials and Factoring	<ul style="list-style-type: none"> Adding and Subtracting Polynomials Multiplying and Factoring Multiplying Binomials Multiplying Special Cases Dividing Polynomials All Factoring 	A.EO.2	4 weeks
Quadratic Functions and Equations	<ul style="list-style-type: none"> Quadratic Graphs and Their Properties Quadratic Functions Solving Quadratic Equations Factoring to Solve Quadratic Equations 	A.EI.3 A.F.2	2 weeks
4th Nine Weeks			
Radical Expressions & Equations	<ul style="list-style-type: none"> Simplifying Radicals Simplifying Cube Roots Add, Subtract, and Multiply Monomial Radicals 	A.EO.4	3 weeks
Statistics	<ul style="list-style-type: none"> Scatterplots Line of Best Fit Curve of Best Fit Solve Statistical Practical Problems 	A.ST.1	3 weeks
SOL Review			3 weeks

Deletions from Algebra 1 (2016 SOL)	Additions to Algebra 1 (2023 SOL)
<ul style="list-style-type: none"> ● A.3a - Express the principal square root of a monomial algebraic expression in simplest form [Included in A2.EO.2] ● A.8 – Analyze a relation to determine if a direct or inverse variation exists and represent a direct variation algebraically and graphically and an inverse variation algebraically [Direct variation included in 7.PFA.1; Direct and inverse variation included in A2.F.1d] 	<ul style="list-style-type: none"> ● A.EO.4 - Add, subtract, and multiply radicals includes numeric cube root expressions; generate equivalent numerical expressions for radicals using rational exponents, limited to rational exponents of $\frac{1}{2}$ and $\frac{1}{3}$ ● A.EI.2 – Create a system of two linear inequalities in two variables to represent a contextual situation ● A.EI.3 – Determine and justify if a quadratic equation has no real solutions, one real solution, or two real solutions ● A.F.1 – Analyze and interpret information revealed by slope-intercept, standard, and point-slope forms of a linear function; compare and contrast characteristics of linear functions ● A.F.2 - Identify the vertex (maximum and minimum) of a quadratic function; investigate, analyze, and compare functions, including quadratic and exponential functions; graph quadratic and exponential functions using transformations ● A.ST.1 - Formulate and investigate questions about bivariate data using a data cycle; determine what variables could be used to explain a contextual problem or answer investigative questions; determine an appropriate method to collect a sample, including a simple random sample; describe strengths and weaknesses of a linear or quadratic model

KEY: EO = Expressions and Operations; EI = Equations and Inequalities; F = Functions; ST = Statistics; EKS = Essential Knowledge and Skills (2016); KS = Knowledge and Skills (2023); US = Understanding the Standard