

Algebra 1B



The following learning targets represent the major concepts studied and assessed in this course.

Unit 0 Linear Relationships and Functions	01 Solve problems involving operations with rational numbers, including order of operations. 02 Evaluate expressions at specific values of the variables. 03 Recognize and combine like terms. 04 Simplify an expression, including those that require the distributive property. 05 Work with radical and integer exponents. 06 Analyze and interpret dot plots, histograms & boxplots, including shape, outliers, center, spread (SOCS). 07 Solve equations, recognize equivalent forms, and determine the number of solutions. 08 Graph a linear equation/inequality, and determine the points that are in the solution set of a function, and evaluate functions for inputs in their domain.
Unit E Linear Systems	E1 Find and interpret the solution to a system of equations by graphing, table, or guess and check. E2 Find and interpret the solution to a system of equations algebraically. E3 Write and solve systems of equations in context and interpret the solution. E4 Represent a system of linear inequalities graphically, including in context.
Unit F Exponential Functions and Equations	F1 Write equations of exponential functions, given a graph, table, word problem, or key features of that function. F2 Graph an exponential function, determine the points that are in the solution set of an exponential function, and evaluate exponential functions for inputs in their domain. F3 Identify key features of exponential functions, interpret parameter changes and analyze the effect of translations and scale changes on exponential functions. F4 I can recognize linear and exponential functions from a table, graph, equation, in context, and compare their rates of change for a given interval. F5 I can write geometric sequences in recursive and explicit form.
Unit G Polynomial Operations and Models	G1 Identify parts of an expression using polynomial terminology (constant, term, degree, leading coefficient, coefficient, monomial, binomial, trinomial). G2 Multiply polynomials, including in context. G3 Add and subtract polynomials, including in context. G4 Simplify expressions involving radicals and rational exponents.
Unit H Quadratic Functions and Equations	H1 Graph a quadratic function in standard form and identify its key features. H2 Divide a polynomial by a monomial and rewrite a polynomial in factored form, including in context. H3 Solve a quadratic equation using an appropriate method (factor, complete the square, square root method, quadratic formula, graph), including in context.
Unit I Functions and Models	I1 Graph and rewrite a quadratic function in equivalent forms and identify its key features (vertex, standard, and intercept/factored forms). I2 Compare linear, exponential, and quadratic functions, and compare their rates of change for a given interval. I3 Solve a system of equations involving linear and quadratic functions algebraically and/or graphically, including in context.
Unit A Data Analysis	A1 Analyze and interpret dot plots, histograms & boxplots, including shape, outliers, center, spread (SOCS). A2 Summarize bivariate categorical data in two-way frequency tables.