Below are the key skills that students should possess by the end of the first semester of Algebra 1. They are based on the Common Core State Standards and are written in student-friendly terms. The learning targets are grouped by unit of study, and the corresponding state standards and textbook resources are listed. Bold lines indicate the end of a quarter.

Power Standard	#	Learning Target	CCSSM	Textbook Resource
Prerequisite Skills		I can write an expression using variables.	A.SSE.1	
		I can simplify an expression using substitution and/or order of operations.		1.1-1.3
		I can identify rational numbers, integers, whole numbers, and irrational numbers.		
		I can add, subtract, multiply, and divide integers, fractions, and decimals.		
		I can simplify variable expressions using the distributive property and combining like terms.		1.4-1.7, 1.9
		I can graph points on a coordinate plane.		
Equations and Inequalities	1	I can create and solve multi-step equations in one variable.	A.REI.3 A.CED.1	2.1-2.5, 4.1
	2	I can explain each step in solving an equation.	A.REI.1	
	3	I can rearrange a formula to solve for a given variable.	A.CED.4	2.6
	4	I can create and solve multi-step inequalities in one variable.	A.REI.3 A.CED.1	3.1-3.4
Functions	5	I can identify domain and range and determine if a graph, table, or set of ordered pairs is a function.	F.IF.1 F.IF.5	5.2
	6	I can use and evaluate function notation.	F.IF.2	5.2
	7	I can write a function rule from given information.	F.BF.1	5.4
	8	I can identify and write formulas for arithmetic sequences.	F.IF.3 F.BF.2	5.6
Linear Equations	9	I can find rates of change from tables, graphs, and equations.	F.IF.6	6.1, 6.2
	10	I can write equations in slope-intercept, point-slope, and standard form from given information.	A.CED.2	6.2-6.5
	11	I can graph linear equations.	A.CED.2 A.REI.10	6.2-6.5
Systems	12	I can solve systems of linear equations by graphing.	A.REI.5 A.REI.6	7.1
	13	I can create and solve linear systems algebraically.	A.REI.11 A.CED.3	7.2-7.4
	14	I can solve systems of linear inequalities by graphing.	A.REI.12 A.CED.3	7.4-7.6

Below are the key skills that students should possess by the end of the second semester of Algebra 1. They are based on the Common Core State Standards and are written in student-friendly terms. The learning targets are grouped by unit of study, and the corresponding state standards and textbook resources are listed. Bold lines indicate the end of a quarter.

Power Standard	#	Learning Target	CCSSM	Textbook Resource
Statistics	15	I can summarize, display, and interpret data for one variable.	S.ID.1-3	2.7
	16	I can summarize, display, and interpret data for two variables, including writing a line of fit function for a scatter plot.	S.ID.5-9	6.6
Exponents	17	I can use the properties of exponents to simplify expressions.	N.RN.1 N.RN.2	8.1-8.5
	18	I can identify and write formulas for geometric sequences.	F.IF.3 F.BF.2	8.6
	19	I can distinguish between situations that can be modeled with linear functions and with exponential functions.	F.LE.1 F.LE.3	8.7 supplement
	20	I can write an exponential function from a graph, relationship, or table and interpret its parts.	F.LE.2 F.LE.5	8.7, 8.8
Polynomial Operations	21	I can add and subtract polynomials.	A.APR.1	9.1
	22	I can multiply polynomials.	A.APR.1	9.2-9.4
	23	I can factor polynomials.	A.SSE.3	9.5-9.8
Quadratics	24	I can graph quadratic functions and show key features, such as intercepts, maximums, and minimums.	F.IF.4 F.IF.7	10.1, 10.2
	25	I can compare quadratic functions in different forms, including equations, graphs, tables, and situations.	F.IF.8 F.IF.9	10.1, 10.2
	26	I can solve quadratic equations by taking square roots, factoring, completing the square, or using the quadratic formula.	A.REI.4	10.3-10.7
	27	I can solve a system consisting of linear and quadratic equations.	A.REI.7	9.8 (new PH book)
	28	I can construct and compare linear, quadratic, and exponential models and use them to solve problems.	F.BF.1 F.BF.3 F.LE.3	10.9