

Mastery Information			Comp./ Obj. #	DOK	Pacing Guide Algebra I Framework – Grade 9
Date	+	-			
					NUMBER AND OPERATIONS
			Alg.C1		Understand relationships between numbers and their properties and perform operations fluently.
			Alg.C1.a	1	Apply properties of real numbers to simplify algebraic expressions, including polynomials.
			Alg.C1.b	2	Use matrices to solve mathematical situations and contextual problems.
					ALGEBRA
			Alg.C2		Understand, represent, and analyze patterns, relations, and functions.
			Alg.C2.a	2	Solve, check, and graph multi-step linear equations and inequalities in one variable, including rational coefficients in mathematical and real-world situations.
			Alg.C2.b	2	Solve and graph absolute value equations and inequalities in one variable.
			Alg.C2.c	2	Analyze the relationship between x and y values, determine whether a relation is a function, and identify domain and range.
			Alg.C2.d	2	Explain and illustrate how a change in one variable may result in a change in another variable and apply to the relationships between independent and dependent variables.
			Alg.C2.e	2	Graph and analyze linear functions.
			Alg.C2.f	2	Use algebraic and graphical methods to solve systems of linear equations and inequalities in mathematical and real-world situations.
			Alg.C2.g	1	Add, subtract, multiply, and divide polynomial expressions.
			Alg.C2.h	1	Factor polynomials by using Greatest Common Factor (GCF) and factor quadratics that have only rational roots.
			Alg.C2.i	1	Determine the solutions to quadratic equations by using graphing, tables, completing the square, the Quadratic formula, and factoring.
			Alg.C2.j	2	Justify why some polynomials are prime over the rational number system.
			Alg.C2.k	2	Graph and analyze absolute value and quadratic functions.
			Alg.C2.l	2	Write, graph, and analyze inequalities in two variables.
					GEOMETRY
			Alg.C3		Understand how algebra and geometric representations interconnect and build on one another.
			Alg.C3.a	2	Apply the concept of slope to determine if lines are parallel or perpendicular.
			Alg.C3.b	2	Solve problems that involve interpreting slope as a rate of

				change.
				MEASUREMENT
		Alg.C4		Demonstrate and apply various formulas in problem-solving situations.
		Alg.C4.a	2	Solve real-world problems involving formulas for perimeter, area, distance, and rate.
		Alg.C4.b	2	Explain and apply the appropriate formula to determine length, midpoint, and slope of a segment in a coordinate plane (i.e., distance formula, Pythagorean Theorem).
		Alg.C4.c	2	Represent polynomial operations with area models.
				Data Analysis & Probability
		Alg.C5		Represent, analyze and make inferences based on data with and without the use of technology.
		Alg.C5.a	3	Draw conclusions and make predictions from scatter plots.
		Alg.C5.b	3	Use linear regression to find the line-of best fit from a given set of data.