ALGEBRA I PREREQUISITES AS IDENTIFIED BY QUALITY CORE

A.1.a.	Set up and solve problems following the correct order of operations (including proportions, percent, and absolute value) with rational numbers (integers, fractions, decimals)
A.1.b.	Find the greatest common factor and least common multiple of a set of whole numbers.
A.1.c.	Use rational numbers to demonstrate knowledge of additive and multiplicative inverses.
A.1.d.	Simplify ratios.
A.1.e.	Use scientific notation when working with very large or very small quantities.
A.1.f.	Add, subtract, multiply, and divide rational numbers, including integers, fractions, and decimals, without calculators.

GEOMETRY PREREQUISITES AS IDENTIFIED BY QUALITY CORE

A.1.a.	Apply algebraic properties (e.g., commutative, associative, distributive, identity, inverse, substitution) to simplify algebraic expressions.
A.1.b.	Solve single-step and multistep equations and inequalities in one variable.
A.1.c.	Write linear equations in standard form and slope-intercept form when given two points, a point and the slope, or the graph of the equation.
A.1.d.	Recognize the concept of slope as a rate of change and determine the slope when given the equation of a line in standard form or slope-intercept form, the graph of a line, two points, or a verbal description.
A.1.e.	Graph a linear equation using a table of values, x- and y-intercepts, or slope-intercept form.
A.1.f.	Find the probability of a simple event.

ALGEBRA II PREREQUISITES AS IDENTIFIED BY QUALITY CORE

A.1.a. Identify properties of real numbers and use them and the correct order of operations to simplify expressions.
A.1.b. Multiply monomials and binomials.
A.1.c. Factor trinomials in the form $ax^2 + bx + c$
A.1.d. Solve single-step and multistep equations and inequalities in one variable.
A.1.e. Solve systems of two linear equations using various methods, including elimination, substitution, and graphing.
A.1.f. Write linear equations in standard form and slope-intercept form when given two points, a point and the slope, or the graph of the equation.
A.1.g. Graph a linear equation using a table of values, x- and y-intercepts, or slope-intercept form.
A.1.h. Find the distance and midpoint between two points in the coordinate plane.
A.1.i. Use sine, cosine, and tangent ratios to find the sides or angles of right triangles.
A.1.j. Use inductive reasoning to make conjectures and deductive reasoning to arrive at valid conclusions.

PRECALCULUS PREREQUISITES AS IDENTIFIED BY QUALITY CORE

A.1.a. Solve linear, quadratic, rational, and radical equations.
A.1.b. Graph linear, quadratic, polynomial, exponential, logarithmic, sine, and cosine functions.
A.1.c. Factor polynomials using a variety of methods.
A.1.d. Use inductive reasoning to make conjectures and deductive reasoning to arrive at valid conclusions.