CSU Early Assessment of Readiness for College Mathematics – Standards Assessed
from the Blueprint for the California Standards Test of Algebra II

Standard	Description of Standard
	ALGEBRA II
AII.1.0	Students solve equations and inequalities involving absolute values.
AII.2.0	Students solve systems of linear equations and inequalities (in two or three variables) by substitution, with graphs, or with matrices.
AII.3.0	Students are adept at operations on polynomials, including long division.
AII.4.0	Students factor polynomials representing the difference of squares, perfect square trinomials, and the sum and difference of two cubes.
AII.5.0	Students demonstrate knowledge of how real and complex numbers are related both arithmetically and graphically. In particular, they can plot complex numbers as points in the plane.
AII.6.0	Students add, subtract, multiply, and divide complex numbers.
AII.7.0	Students add, subtract, multiply, divide, reduce, and evaluate rational expressions with monomial and polynomial denominators and simplify complicated rational expressions, including those with negative exponents in the denominator.
AII.8.0	Students solve and graph quadratic equations by factoring, completing the square, or using the quadratic formula. Students apply these techniques in solving word problems. They also solve quadratic equations in the complex number system.
AII.9.0	Students demonstrate and explain the effect that changing a coefficient has on the graph of quadratic functions; that is, students can determine how the graph of a parabola changes as a, b, and c vary in the equation $y = a(x-b)^2 + c$.
AII.10.0	Students graph quadratic functions and determine the maxima, minima, and zeros of the function.
AII.11.2*	Students judge the validity of an argument according to whether the properties of real numbers, exponents, and logarithms have been applied correctly at each step. *Not included if argument is about properties of logarithms.
AII.12.0	Students know the laws of fractional exponents, understand exponential functions, and use these functions in problems involving exponential growth and decay.
AII.15.0*	Students determine whether a specific algebraic statement involving rational expressions, radical expressions, or logarithmic or exponential functions is sometimes true, always true, or never true. *If NOT about logarithms.
AII.17.0	Given a quadratic equation of the form $ax^2 + by^2 + cx + dy + e = 0$, students can use the method for completing the square to put the equation into standard form and can recognize whether the graph of the equation is a circle, ellipse, parabola, or hyperbola. Students can then graph the equation.
AII.18.0	Students use fundamental counting principles to compute combinations and permutations.
AII.22.0	Students find the general term and the sums of arithmetic series and of both finite and infinite geometric series.
AII.24.0	Students solve problems involving functional concepts, such as composition, defining the inverse function and performing arithmetic operations on functions.