

“Student-Friendly” Standards for CCGPS Analytic Geometry

Unit 4 | Extending the Number System

Standard Code	Mastery Level	Standard
N.RN.1		Understand that the denominator of the rational exponent is the root index and the numerator is the exponent of the radicand. For example, $5^{1/2} = \sqrt{5}$.
		Extend the properties of exponents to justify that $(5^{1/2})^2 = 5$.
N.RN.2		Convert from radical representation to using rational exponents.
		Convert from rational exponents to radical representations.
N.RN.3		Know and justify that when adding or multiplying two rational numbers the result is a rational number.
		Know and justify that when adding a rational number and an irrational number the result is irrational.
		Know and justify that when multiplying of a nonzero rational number and an irrational number the result is irrational.
N.CN.1		Know that every number is a complex number of the form $a + bi$, where a and b are real numbers. Know that the complex number $i^2 = -1$.
N.CN.2		Apply the fact that the complex number $i^2 = -1$. Use the associative, commutative, and distributive properties, to add, subtract, and multiply complex numbers.
N.CN.3 (+)		Given a complex number, find its conjugate and use it to find quotients of complex numbers.
A.APR.1		Understand the definition of a polynomial. Understand the concepts of combining like terms and closure. Add, subtract, and multiply polynomials and understand how closure applies under these operations.