

UNIT 6 Polynomial Functions

Vocabulary Words

Polynomial	Multiplicity	Imaginary Root Theorem
Polynomial function	Long division	
Degree	Synthetic division	Fundamental theorem of Algebra
Standard form of a polynomial	Remainder theorem	permutation
Degree of a polynomial	Sum of cubes	n factorial
Relative maximum	Difference of cubes	combination
Relative minimum	Rational Root Theorem	expand
Factor Theorem	Irrational Root Theorem	Pascal's triangle
Multiple Zero	Conjugates	Binomial theorem

California Content Standards

- 3.0 Students are adept at operations on polynomials, including long division.
- 4.0 Students factor polynomials representing the sum and difference of two cubes.
- 5.0 Students demonstrate knowledge of how real and complex numbers are related arithmetically.
- 6.0 Students add, subtract, multiply and divide complex numbers.
- 8.0 Students solve and graph quadratic equations by factoring.
- MA 4.0 Students know the statement of, and can apply, the fundamental theorem of algebra.
- 18.0 Students use fundamental counting principles to compute permutations and combinations.
- 19.0 Students use combinations and permutations to compute probabilities.
- 20.0 Students know the binomial theorem and use it to expand binomial expressions that are raised to positive integer powers.