

Vocabulary Toolkit

	Term	Definition / Additional Information
3.2 T	Degree (of a polynomial)	The highest valued whole number exponent. The degree of a polynomial function determines the end behavior (regardless of the other terms in the function).
3.5 T	Fundamental Theorem of Algebra	Any polynomial of n degree has n roots.
3.6 T	Multiplicity	The number of times a particular number is a zero for a given polynomial. For example, in the polynomial function $f(x) = (x - 3)^4(x - 5)(x - 8)^2$, the zero 3 has multiplicity 4, 5 has multiplicity 1, and 8 has multiplicity 2. Although this polynomial has only three zeros, we say that it has seven roots counting multiplicity.
3.1 T	Polynomial	An expression consisting of variables and coefficients, that involves only the operations of addition, subtraction, multiplication, and non-negative integer exponents.
3.7 T	Remainder Theorem	The remainder of the division of a polynomial by a linear polynomial $x - a$ is equal to $P(a)$.