Zeros of a Polynomial Function

If $(x-c)$ is a factor of a polynomial $P(x)$, then c is called a **zero of the polynomial function**.

Multiple Zeros of a Polynomial: If a polynomial $P(x)$ has $x-c$ occurring as a factor exactly k times, then c is a **zero of multiplicity** k of the polynomial function $y=P(x)$.

Fundamental Theorem of Algebra: A polynomial function $P(x)$ of degree n has exactly n complex zeros.

Integral Zero Theorem: If an integer is a zero of a given integral polynomial function, then it is a divisor of the constant term of the polynomial.