Identifying Zeros and Graphing Polynomials

Today's Standard

HSA.APR.B3 - Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

Cues	Notes
What are polynomial zeros?	Zeros of a polynomial are the x-values where the polynomial equals zero.
How do you factor polynomials?	Factor polynomials by finding common factors, using special formulas, or applying the quadratic formula.
What is the importance of polynomial zeros?	Zeros help determine the x-intercepts of the polynomial's graph.
How do you graph a polynomial?	Graph a polynomial by plotting its zeros and analyzing its end behavior and turning points.
What are common polynomial graph features?	Important features include zeros, end behavior, turning points, and intercepts.

Summary

Understanding and identifying polynomial zeros through factorization is essential for graphing polynomial functions accurately. This knowledge is foundational for higher-level mathematics and real-world applications.