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.

Real-World Applications for this Standard

Modeling population growth; Predicting profit in business; Engineering structural analysis; Physics trajectory problems; Optimizing production in manufacturing

Today I Learned

Today, we learned how to find the zeros of polynomials and use them to draw graphs. Zeros are where the polynomial equals zero, and they help us understand the graph's shape.

Common Stumbling Blocks

Some students think that all polynomials can be easily factored, but that's not true. Others think zeros are the only important part of the graph, but we also need to look at how the graph behaves and its turning points.

Quiz Me

- What is a zero of a polynomial?
- How do we find zeros of a polynomial?
- Why are zeros important?
- What else should we look at in a polynomial graph?
- Can all polynomials be factored easily?

Help Me

Finding the zeros of polynomials can help us solve real-world problems, like predicting profits in business or understanding how things move in physics. It's like finding key points on a map to understand the whole picture.