Graphing rational functions

Today's Standard

HSF.IF.C7d - (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.

Real-World Applications for this Standard

Predicting population growth and decline; Modeling economic supply and demand; Analyzing electrical circuits; Understanding rates of chemical reactions

Today I Learned

Today, we learned how to graph rational functions, which are like fractions made up of polynomials. We found out where the graph touches the x-axis and where it goes up or down forever.

Common Stumbling Blocks

Sometimes, kids think that the graph always goes up or down where the bottom part of the fraction is zero, but that's not always true. Also, they might think the graph always flattens out far away, but it can do different things.

Quiz Me

- What is a rational function?
- How do you find where the graph touches the x-axis?
- What happens when the bottom of the fraction is zero?
- What does 'end behavior' mean?
- Can the graph go up or down forever?

Help Me

Rational functions can help us understand things like how populations grow or shrink, how much stuff people want to buy and sell, and how fast chemical reactions happen. We look at where the graph touches the x-axis and where it goes up or down forever to understand these things.