Simplifying Rational Expressions

Today's Standard

HSA.APR.D6 - Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system.

Real-World Applications for this Standard

Simplifying complex fractions in engineering problems; Analyzing financial models in economics; Solving real-world problems involving rates and ratios; Modeling population dynamics in biology

Today I Learned

Today, we learned how to rewrite fractions with polynomials in a simpler form. This helps solve math problems more easily.

Common Stumbling Blocks

Sometimes, kids think the leftover part of the fraction can be bigger than the bottom part, but it can't. Another issue is they might think there's only one way to do it, but there are a few different ways.

Quiz Me

- What is a fraction with polynomials?

- How do you change a fraction with polynomials?

- What must be smaller, the leftover part or the bottom part?

- Can you use different ways to change the fraction?

- Why do we change fractions with polynomials?

Help Me

We change fractions with polynomials to make them easier to work with. This is useful in real life when solving problems in science, money, and more.