Operations with Rational Expressions

Today's Standard

HSA.APR.D7 - (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.

Cues	Notes
What are rational expressions?	Rational expressions are fractions where the numerator and/or denominator are polynomials.
How do you simplify rational expressions?	Simplify by factoring the numerator and denominator and canceling common factors.
What operations can be performed on rational expressions?	You can add, subtract, multiply, and divide rational expressions, similar to rational numbers.
What is a common misconception about rational expressions?	A common misconception is that rational expressions cannot be simplified like rational numbers.
How can you divide rational expressions?	Division of rational expressions is defined as long as the divisor is not zero.

Summary

Rational expressions are similar to rational numbers and can be simplified and operated on using similar methods. Understanding these operations is crucial for solving more complex algebraic problems.