High School Algebra Playlist: Operations on Rational Expressions

Aligns with <u>CCSS.Math.Content.HSA.APR.D.7</u>: 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.

Related Standards

- <u>CCSS.Math.Content.HSA.APR.A.1</u>: Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.
- <u>CCSS.Math.Content.HSA.SSE.A.1.a</u>: Interpret parts of an expression, such as terms, factors, and coefficients.



Objectives

In this module, you will learn and practice the following skills:

- understand under which operations the rational expressions are closed
- add, subtract, multiply, and divide rational expressions

Let's get started!

Key Terms

• A set has **closure** under an operation or is **closed** under that operation if the result of an operation on members of the set is also a member of the set.

Connections

• https://openstaxcollege.org/textbooks/algebra-and-trigonometry; section 1.6, about page 89

