

Grade 9-11

Distance Learning Module 5: Week of: 4/27 - 5/1

Adding & Subtracting Rational Expressions

## Mathematics: Algebra 2 (Level 2) - Modified from [Unit 5 - Rational Expressions & Functions](#)

### Targeted Goals from Stage 1: Desired Results

**Content Knowledge:** Rewrite rational expressions (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.)

**Vocabulary:** Least common denominator, least common multiple

**Skills:** finding the restrictions on the domain, manipulating rational expressions (add/subtract/multiply/divide)

### Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday:	LIVE Instruction: Adding Fractions, Determining Restrictions (SmartBoard Notes) Article: Intro to Adding & Subtracting Rational Expressions Video Tutorial: Adding & Subtracting Rational Expression (like denominators)	Khan Practice: Add & subtract rational expressions: like denominators
Tuesday:	Video Tutorial: Intro to adding rational expressions with unlike denominators Video Tutorial: Adding Rational Expressions with unlike denominator Video Tutorial: Subtracting rational expressions: unlike denominators	Khan Practice: Add & subtract rational expressions: unlike denominators
Wednesday:	Video Tutorial: Subtracting rational	Khan Practice: Adding & subtracting rational

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
	expressions: factored denominators Video Tutorial: Finding Least Common Multiples of Polynomials	expressions (advanced) Khan Practice: Add & subtract rational expressions: factored denominators
Thursday:	Video Tutorial: Subtracting Rational Expressions	Khan Practice: Add and Subtract Rational Expressions
Friday:	LIVE Instruction: Review of Finding the Least Common Denominator, Adding & Subtracting Rational Expressions, Stating Restrictions SmartBoard Notes	Worksheet: Adding & Subtracting Rational Expressions Worksheet

**Week criteria for success** (attach student checklists or rubrics):

At the end of this module student will be able to:

- add and subtract rational expressions with like denominators
- find the least common denominator of given rational expressions
- add or subtract rational expressions with unlike denominators finding their least common denominator, and simplify them.

**Supportive resources and tutorials for the week** (plans for re-teaching):

- Office Hours
- SmartBoard Notes
- Math Planet Article & Video Tutorial: Subtracting Rational Expression with unlike denominators
- YouTube Video: Adding & Subtracting Rational Expressions
- YouTube Video : Adding & Subtracting RAtional Expression (unlike denominators)
- Varsity Tutors : Adding and Subtracting Rational Expressions with Unlike Denominators