

### **Math Virtual Learning**

# Algebra 2/Honors Algebra 2

May 1, 2020



### Lesson: May 1, 2020

## **Objective/Learning Target:** Students will practice adding and subtracting rational expressions.

#### Let's Review:

## Get out a sheet of paper and watch the 2 videos for adding and subtracting rational expressions.

Like Denominators:



Unlike Denominators:



#### Steps for Adding and Subtracting Rational Expressions:

#### Like Denominators:

- Identify the Least Common Denominator (LCD)
- Identify the domain (this is the restricted values for x)
- Combine like terms in the numerator
- Factor and simplify if possible

#### Write this down if you need to!

Ask yourself, why are there extra steps when the denominators are not the same?

#### Unlike Denominators:

- Factor the denominators
- Identify the Least Common Denominator (LCD)
- Identify the domain (this is the restricted values for x)
- Multiply each term by what it is missing from the LCD
- Combine like terms in the numerator
- Factor and simplify if possible

#### Add and Subtract **Rational Expressions Practice:**

On the same sheet of paper, add/subtract the following practice problems.



Once you have completed the problems, click here to check your answers!

1) $\frac{8d^2 - 7c^2}{2d^3c^3} - \frac{8d^2 + 8c^2}{2d^3c^3}$	6) $\frac{7y+8h}{4y^3} + \frac{8y+9h}{4y^3}$
2) $\frac{3b^2 - 4n^2}{4b^3} - \frac{8b^2 + 2n^2}{4b^3}$	7) $\frac{5h-5}{6h^3-15h} + \frac{4h+9}{6h^3-15h}$
3) $\frac{7g+9}{4g^6+17g} - \frac{3g+3}{4g^6+17g}$	8) $\frac{5q^2-4}{8q^6-7} + \frac{6q^2}{8q^6-7}$
$\frac{6r^3 - 8}{8r^6 - 17} - \frac{2r^3}{8r^6 - 17}$	9) $\frac{x}{6} + \frac{7x+5}{x+7}$
5) $\frac{2z^2 - 3q^2}{7z^5q^5} + \frac{2z^2 + 8q^2}{7z^5q^5}$	10) $\frac{k}{9} - \frac{4k+6}{k+1}$

#### **Additional Practice:**

Click on the links below to get additional practice and to check your understanding!

Rational Expressions - Add & Subtract: <u>Notes</u>, <u>Practice Worksheet</u>, <u>Answer Key</u>

Adding and Subtracting Rational Expressions: <u>Practice Worksheet</u> and <u>Answer Key</u>