

Name: _____ Hour: _____ Date: _____

NOTES: Section 8.5 – Add and Subtract Rational Expressions

Goals: #1 - I can add and subtract rational expressions with common denominators.

#2 - I can find the least common multiple (LCM) of polynomials.

#3 - I can add and subtract rational expressions with uncommon denominators.

Homework: Lesson 8.5 Worksheet



Exploration #1: Work with a partner and add the following fractions.

1. $\frac{3}{5} + \frac{1}{5}$

2. $\frac{2}{3} + \frac{2}{3}$

3. $\frac{1}{4} + \frac{3}{4}$

Notes:

As with _____, to _____ or _____

rational expressions with _____ denominators, _____

their _____ and keep the common _____.

Example #1: Perform the indicated operation.

1. $\frac{7}{4x} + \frac{3}{4x}$

2. $\frac{2x}{x+6} - \frac{5}{x+6}$

You practice: Perform the indicated operation.

1. $\frac{2x^2}{x^2+1} + \frac{2}{x^2+1}$

2. $\frac{7}{12x} - \frac{5}{12x}$

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Exploration #1: Work with a partner and add the following fractions.

1. $\frac{3}{5} + \frac{1}{10}$

2. $\frac{7}{10} + \frac{1}{3}$

3. $\frac{1}{2} + \frac{1}{8}$

Notes:

As with _____, to _____ or _____

rational expressions with _____ denominators, we need to first rewrite the expressions to have _____ denominators.

Then we can _____ or _____ the rational expressions.

Example #2: Find the least common multiple.

1. $4x^2 - 16$ and $6x^2 - 24x + 24$

You practice: Find the least common multiple.

1. $5x^2 - 45$ and $4x^2 + 24x + 36$

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Example #3: Perform the indicated operation.

1. $\frac{7}{9x^2} + \frac{x}{3x^2 + 3x}$

2. $\frac{x+2}{2x-2} - \frac{-2x-1}{x^2-4x+3}$

You practice: Perform the indicated operation.

1. $\frac{x+1}{x^2+4x+4} - \frac{6}{x^2-4}$

2. $\frac{x}{x^2-x-12} + \frac{5}{12x-48}$