

Addition & Subtraction of Rational Expressions

Date _____ Period _____

Class Examples: Simplify each expression.

1) $\frac{4}{7} - \frac{5}{3}$

2) $\frac{x+1}{3x+15} + \frac{3}{2}$

$$\frac{11x+47}{6(x+5)}$$

Find the least common multiple of each pair of expressions.

3) $2x^2(3x+2)$ and $6x(3x+2)(x-1)$

4) $2x^2 + 2x - 12$ and $3x^2 + 9x$

Simplify each expression.

5) $\frac{x-6}{5x-10} - 5$

$$\frac{-24x+44}{5(x-2)}$$

6) $\frac{2}{9n-18} - \frac{3n}{2}$

$$\frac{4-27n^2+54n}{18(n-2)}$$

7) $\frac{4}{7x-8} + \frac{3x}{7x^4-21x^3}$

$$\frac{28x^3-84x^2+21x-24}{7x^2(x-3)(7x-8)}$$

8) $\frac{9}{4n} + \frac{n+8}{3n^2-18n-81}$

$$\frac{31n^2-130n-729}{12n(n-9)(n+3)}$$

9) Page 539 #1-4; 7-21.