

Addition & Subtraction of Rational Expressions

Date _____ Period _____

Class Examples: Simplify each expression.

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

2) $\frac{2}{15} + \frac{7}{25}$

Simplify each expression.

3) $\frac{2v}{4v} + \frac{2u}{4}$

4) $\frac{4}{2} - \frac{3}{3m^3}$

5) $\frac{6}{2} + \frac{n-3}{4n-6}$

6) $\frac{2}{m+5} - \frac{3}{m+1}$

7) $\frac{4n}{4n+32} - \frac{2}{n-10}$

8) $\frac{9}{5v+2} - \frac{7v}{v+5}$

9) $\frac{10x}{2x^4 + 14x^3} + \frac{4}{x+4}$

10) $\frac{x-5}{x^2-x-6} + \frac{x+8}{2x^2-6x-20}$

Addition & Subtraction of Rational Expressions

Date _____ Period _____

Class Examples: Simplify each expression.

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

2) $\frac{2}{15} + \frac{7}{25}$

Simplify each expression.

3) $\frac{2v}{4v} + \frac{2u}{4}$

$$\frac{1+u}{2}$$

4) $\frac{4}{2} - \frac{3}{3m^3}$

$$\frac{2m^3 - 1}{m^3}$$

5) $\frac{6}{2} + \frac{n-3}{4n-6}$

$$\frac{13n - 21}{2(2n - 3)}$$

6) $\frac{2}{m+5} - \frac{3}{m+1}$

$$\frac{-m - 13}{(m+5)(m+1)}$$

7) $\frac{4n}{4n+32} - \frac{2}{n-10}$

$$\frac{n^2 - 12n - 16}{(n-10)(n+8)}$$

8) $\frac{9}{5v+2} - \frac{7v}{v+5}$

$$\frac{-35v^2 - 5v + 45}{(v+5)(5v+2)}$$

9) $\frac{10x}{2x^4 + 14x^3} + \frac{4}{x+4}$

$$\frac{5x + 20 + 4x^3 + 28x^2}{x^2(x+7)(x+4)}$$

10) $\frac{x-5}{x^2-x-6} + \frac{x+8}{2x^2-6x-20}$

$$\frac{3x^2 - 15x + 26}{2(x+2)(x-3)(x-5)}$$