

Bell Work

Add or Subtract.

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

$$\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

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

$$\frac{7}{35} - \frac{15}{35} = -\frac{8}{35}$$

Find the least common multiple (LCM) of each pair of polynomials.

$$1) \overbrace{9(x+2)(2x-1)} \quad \text{and} \quad \overbrace{3(x+2)}$$

$$\text{LCM: } 9(x+2)(2x-1)$$

$$2) \begin{array}{l} x^2 - 9x - 10 \quad \text{and} \quad 2x + 10 \\ (x-10)(x+1) \quad \quad 2(x+5) \end{array}$$

$$\text{LCM: } 2(x+5)(x-10)(x+1)$$

Find the sum or difference. State any restrictions on the variables.

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

$x \neq 0$

- la. Farter*
1. Name Restrictions
 2. Get Common Denominator
 3. Add or Subtract

$$4) \frac{d-3}{2d+1} + \frac{d-1}{2d+1} = \frac{2d-4}{2d+1} \quad d \neq -\frac{1}{2}$$

$2d+1=0$

$$5) \frac{-5y}{2y-1} - \frac{y-3}{2y-1} = \frac{-6y+3}{2y-1} = -3 \frac{(2y-1)}{2y-1} = -3$$

$y \neq \frac{1}{2}$

$$6) \frac{5x}{x^2-9} + \frac{2}{x+4} = \frac{2(x+4)}{(x+3)(x-3)} + \frac{5x}{x+4} (x^2-9)$$

$$\frac{5x^2+20x}{(x+4)(x+3)(x-3)} + \frac{2x^2-18}{(x+4)(x+3)(x-3)}$$

$$\frac{7x^2+20x-18}{(x+4)(x+3)(x-3)}$$

$x \neq -4, -3, 3$

$$7) \frac{5x}{x^2-x-6} + \frac{4}{x^2+4x+4}$$

$$\frac{5x(x+2)}{(x-3)(x+2)} + \frac{4(x-3)}{(x+2)(x+2)}$$

$$\frac{5x^2+10x}{(x-3)(x+2)(x+2)} + \frac{4x-12}{(x-3)(x+2)(x+2)} = \frac{5x^2+14x-12}{(x-3)(x+2)(x+2)}$$

$x \neq 3, -2$

$$8) \frac{2x}{x^2-x-2} - \frac{4x}{x^2-3x+2}$$

$$\frac{(x-1) 2x}{(x+1)(x-2)} - \frac{4x (x+1)}{(x-1)(x-2)}$$

$$\frac{2x^2 - 2x}{(x-1)(x+1)(x-2)} - \frac{4x^2 + 4x}{(x-1)(x+1)(x-2)}$$

$$\frac{-2x^2 - 6x}{(x-1)(x+1)(x-2)}$$

$$x \neq 1, -1, 2$$