

UnLike Denominators:

$$\frac{5}{9x} - \frac{2 \cdot 3x}{3 \cdot 3x}$$

$$\frac{5 - 6x}{9x}$$

$$\frac{2 \cdot 5}{2 \cdot 3x} + \frac{3 \cdot 3}{2x \cdot 3}$$

$$\frac{10 + 9}{6x}$$

$$\frac{19}{6x}$$

$$\frac{4}{2x-10} + \frac{7}{x-5}$$

$$\frac{4}{2(x-5)} + \frac{7 \cdot 2}{(x-5) \cdot 2}$$

$$\frac{4 + 14}{2(x-5)} = \frac{18}{2(x-5)}$$

$$\frac{9}{x-5}$$

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

$$\frac{15x - 15 + 3x + 12}{(x+4)(x-3)}$$

$$\frac{18x - 3}{(x+4)(x-3)}$$

$$\frac{5}{5x+15} + \frac{-8}{x+3}$$

$$\frac{5}{5(x+3)} + \frac{-8(5)}{x+3}$$

$$\frac{5 - 40}{5(x+3)} = \frac{-35}{5(x+3)}$$

$$\frac{-7}{x+3}$$

$$\frac{12(x-2) - 3(x+4)}{(x+4)(x-2)}$$

$$\frac{12x - 24 - 3x - 12}{(x+4)(x-2)}$$

$$\frac{9x - 36}{(x+4)(x-2)} = \frac{9(x-4)}{(x+4)(x-2)}$$

$$\frac{10x}{x-4} + \frac{4x}{2x-8}$$

$$\frac{2(10)}{2(x-4)} + \frac{4}{2(x-4)}$$

$$\frac{24}{2(x-4)} = \frac{12}{x-4}$$

$$\frac{10x}{x+9} + \frac{-3x}{3x+27}$$

$$\frac{2(10)}{3(x+9)} + \frac{-3}{3(x+9)}$$

$$\frac{-27}{3(x+9)}$$

$$\frac{-9}{x+9}$$

$$\frac{10}{x^2 - 5x + 14} + \frac{2}{x-7}$$

$$\frac{10}{(x-7)(x+2)} + \frac{2(x+2)}{(x-7)(x+2)}$$

$$\frac{2x+14}{(x-7)(x+2)} = \frac{2(x+7)}{(x-7)(x+2)}$$

$$\frac{8}{x^2 + 3x - 18} + \frac{-3}{x-3}$$

$$\frac{8}{(x+6)(x-3)} + \frac{-3(x+6)}{(x-3)(x+6)}$$

$$\frac{-3x-10}{(x+6)(x-3)}$$