

$$\textcircled{1} \frac{v-4}{3v-15} + \frac{5v-5}{3v-15}$$

$$\textcircled{2} \frac{4x}{5x+15} + \frac{x+2}{5x+15}$$

$$\frac{6v-9}{3v-15}$$

$$\frac{5x+2}{5x+15}$$

$$\textcircled{3} \frac{(n+1)2n}{(n+1)n-4} + \frac{2(n-4)}{n+1} = \frac{\quad}{(n-4)(n+1)}$$

$$\frac{2n^2 + 2n + 2n - 8}{(n+1)(n-4)} = \frac{2n^2 + 4n - 8}{(n+1)(n-4)}$$

$$\textcircled{4} \frac{(x+2)6x}{(x+2)6x-1} + \frac{3(6x-1)}{x+2(6x-1)}$$

$$\frac{6x^2 + 12x + 18x - 3}{(x+2)(6x-1)}$$

$$\frac{6x^2 + 30x - 3}{(x+2)(6x-1)}$$

Notes #5 Subtracting Rational Expressions

remember when...

$$(x^2 + 2x - 5) \oplus (-4x + 8)$$

$$x^2 - 2x + 3$$

change the signs

really becomes an addition prob. after that

Like denom

①

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

$$+ \frac{-5x + 6}{x^2 - 2x + 1}$$

don't mess w/ denom if they are the same.

Careful with your signs

- affects everything on top of the fraction

$$\frac{2}{x^2 - 2x + 1} + \frac{-5x - 6}{x^2 - 2x + 1} = \frac{-5x - 4}{x^2 - 2x + 1}$$

Unlike denom

$$\textcircled{1} \quad \frac{2}{x-1} \quad \oplus \quad \frac{\downarrow -3}{x+2}$$

$$\frac{(x+2) \cdot 2}{(x+2)(x-1)} + \frac{-3(x-1)}{(x+2)(x-1)}$$

$$\frac{2x+4}{(x+2)(x-1)} + \frac{-3x+3}{(x+2)(x-1)} = \frac{-x+7}{(x+2)(x-1)}$$

before you mess
with the denom.
take the - and
attach it to
the top

try this:

$$\textcircled{2} \quad \frac{(x-4) \cdot 8}{(x-4)(x+3)} \quad \oplus \quad \frac{\downarrow -5(x+3)}{(x-4)(x+3)}$$

$$\frac{8x-32}{(x-4)(x+3)} + \frac{-5x-15}{(x-4)(x+3)} = \frac{3x-47}{(x-4)(x+3)}$$