

# Rational Expressions w/ Like denominators

Check for subtr.  
Distribute if necessary



CLT



Factor if you can, then cancel

$$\textcircled{1} \quad \frac{4x^2 + 6}{x-2} + \frac{3x^2 + 7}{x-2}$$

$$\frac{7x^2 + 13}{x-2}$$

$$\textcircled{2} \quad \frac{4p-3}{p+2} + \frac{5-3p}{p+2}$$

$$\frac{\cancel{p+2}}{\cancel{p+2}} = \boxed{1}$$

$$\textcircled{3} \quad \frac{z-6}{2z+3} + \frac{-5z}{2z+3}$$

$$\frac{-4z-6}{-2-2}$$

$$\frac{-4z-6}{2z+3} \rightarrow \frac{-2(2z+3)}{\cancel{2z+3}}$$

$$\rightarrow \boxed{-2}$$

$$\textcircled{4} \quad \frac{x^2+10x}{x+3} + \frac{-2x+15}{x+3}$$

$$\frac{x^2+8x+15}{x+3} \quad \begin{array}{r} 15 \\ \times \\ \hline 5 \\ \times \\ \hline 8 \end{array}$$

~~(x+3)(x+5)~~

$$\frac{\cancel{x+3}(x+5)}{\cancel{x+3}} = \boxed{x+5}$$