

3

$$\frac{\frac{x-3}{x+1} - \frac{x}{x-2}}{5 + \frac{2}{x-2}}$$

$$\frac{(x+1)(x-2)\left(\frac{x-3}{x+1}\right) - (x+1)(x-2)\left(\frac{x}{x-2}\right)}{5(x+1)(x-2) + (x+1)(x-2)\left(\frac{2}{x-2}\right)}$$

$$\frac{(x-2)(x-3) - (x+1)x}{5(x+1)(x-2) + 2(x+1)}$$

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

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

$$\frac{-6x + 6}{5x^2 - 3x - 8}$$

GCF  
KEEN#

$$\frac{-6(x-1)}{5x^2 - 3x - 8(x+1)}$$

4

$$\frac{\frac{5}{x} - 1}{\frac{25}{x} - x}$$

$$\frac{x\left(\frac{5}{x}\right) + x(-1)}{x\left(\frac{25}{x}\right) + x(-x)}$$

$$\frac{5-x}{25-x^2}$$

$$\frac{-x+5}{-x^2+25}$$

GCF  
GCF

$$\frac{-1(x-5)}{-1(x^2-25)}$$

DTS

$$\frac{-1(x-5)}{-1(x+5)(x-5)}$$

$$\frac{1}{x+5}$$