

1-01-39 MW

online

$$f(x) = \frac{x-3}{x+2}, g(x) = \frac{2x-1}{x-3} \Rightarrow$$

$$(f+g)(x) = \left[\frac{x-3}{x+2} + \frac{2x-1}{x-3} \right] \quad \text{Final Answer for Test (unsimplified)}$$

$$\text{LCD} = (x+2)(x-3)$$

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

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

$$= \frac{x^2 - 6x + 9 + 2x^2 + 3x - 2}{\text{LCD}}$$

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

is simplified in MY book

The MyLab wants

$$\frac{3x^2 - 3x + 7}{x^2 - x - 6}$$

I didn't

show details on

$$(x-3)(x-3) = x^2 - 6x + 9$$

OR

$$(2x-1)(x+2) = 2x^2 + 3x - 2$$