



9. Ayuda para calcular productos y cocientes de fracciones algebraicas

Soluciones

1 Efectúa las siguientes operaciones y simplifica:

$$a) \frac{x+3}{5} \cdot \frac{7}{x+2} = \frac{(x+3) \boxed{7}}{\boxed{5}(x+2)} = \frac{\boxed{7}x + \boxed{21}}{\boxed{5}x + \boxed{10}}$$

$$b) \frac{x}{x+2} \cdot \frac{5+x}{3x} = \frac{\boxed{x}(\boxed{5} + \boxed{x})}{(\boxed{x} + \boxed{2})3x} = \frac{\boxed{5}x + x^2}{\boxed{3}x^2 + \boxed{6}x}$$

$$c) \frac{5-x}{x} : \frac{2-x}{3} = \frac{\boxed{3}(5-x)}{\boxed{x}(2-x)} = \frac{\boxed{15} - \boxed{3}x}{\boxed{2}x - x^2}$$

$$d) \frac{x}{x+1} : \frac{x-1}{2x} = \frac{\boxed{x} \boxed{2x}}{(\boxed{x} + \boxed{1})(\boxed{x} - \boxed{1})} = \frac{\boxed{2}x^2}{x^2 - \boxed{1}}$$

$$e) \frac{x^2+3x}{4} : \frac{5}{x} = \frac{\boxed{x}(x^2 + \boxed{3x})}{\boxed{5} \cdot \boxed{4}} = \frac{\boxed{x^3} + \boxed{3}x^2}{\boxed{20}}$$