Exercices de vérification

Simplifier les expressions algébriques suivantes (ajouter les contraintes) :

1. $\dfrac{3x^2 - 12}{x^2 - 3x + 2} \div \dfrac{5x^2 + 10x}{3x^2 - 2x - 1}$

2. $\dfrac{3}{x^2 + x} - \dfrac{6x}{(x+1)^2}$

3. $\dfrac{x}{(x+1)} + \dfrac{2x - 4}{x^2 - 4x - 5}$

4. $4 - \dfrac{3}{x(x-1)}$

[Réponses](#)

1)
$\dfrac{3(3x+1)}{5x} \left(x \notin \left\{ 1, 2, -\dfrac{1}{3} \right\} \right)$

2)
$\dfrac{-3(x-1)(2x+1)}{x(x+1)^2} \left(x \notin \{0, -1\} \right)$

3)
$\dfrac{x-4}{x-5} \left(x \notin \{-1, 5\} \right)$

4)
$\dfrac{(2x+1)(2x-3)}{x(x-1)} \left(x \notin \{0, 1\} \right)$