

$$\text{si } u = -x^2 + 2x - 1 \\ u' = -2x + 2$$

$$v = x^2 - 5x + 6 \\ v' = 2x - 5$$

$$\Rightarrow f'(x) = \frac{(-2x+2)(x^2-5x+6) - (-x^2+2x-1)(2x-5)}{(x^2-5x+6)^2} \quad \leftarrow \text{effectuer et réduire}$$

$$= \frac{-2x^3 + 10x^2 - 12x + 2x^2 - 10x + 12 - (-2x^3 + 5x^2 + 4x^2 - 10x - 2x + 5)}{(\dots)^2}$$

$$= \frac{-\cancel{2x^3} + \underline{12x^2} - \underline{22x} + 12 + \cancel{2x^3} - \underline{5x^2} - \underline{4x^2} + \underline{10x} + \underline{2x} - 5}{(\dots)^2} = \frac{3x^2 - 10x + 7}{(\dots)^2}$$

ou

$$\Rightarrow f'(x) = \frac{-2(x-1)(x^2-5x+6) - (-(x-1)^2(2x-5))}{(x^2-5x+6)^2}$$

$$= \frac{(x-1) \left[-2(x^2-5x+6) + \underbrace{(x-1)(2x-5)}_{2x^2-7x+5} \right]}{(x^2-5x+6)^2}$$

$$= \frac{(x-1)(3x-7)}{(x^2-5x+6)^2}$$