

Ex 2

Factoriser les expressions suivantes

$$E = -2x^2 + 3x - 1$$

$$F = 2x^3 - 5x^2 - x + 6 \quad (\text{On a 2 solution particulier})$$

$$-2x^2 + 3x - 1 = 0 \mapsto x_1 = 1 \quad ; \quad x_2 = \frac{1}{2}$$

$$\begin{aligned} E = -2x^2 + 3x - 1 &= -2 \cdot (x - 1) \left(x - \frac{1}{2}\right) \\ &= (x - 1) (-2x + 1) \end{aligned}$$

$$F = 2x^3 - 5x^2 - x + 6 = (x - 2) (2x^2 - x - 3)$$

$$\begin{array}{r|l} 2x^3 - 5x^2 - x + 6 & x - 2 \\ - 2x^3 + 4x^2 & \hline \hline -x^2 - x & 2x^2 - x - 3 \\ x^2 - 2x & \hline \hline -3x + 6 & \\ 3x - 6 & \\ \hline = 0 & \end{array}$$