$f(x) = 2x^3 - x^2 - 7x + 6$

$\pm \frac{\text{factors } 6}{\text{factors } 2}$ $\pm \frac{1, 2, 3, 6}{1, 2}$ $= \pm \left(1, 2, 3, 6, \frac{1}{2}, \frac{3}{2}\right)$

$f(1) = 2 - 1 - 7 + 6 = 0$ ✓ $(x-1)$

$f(2) = 2 \cdot 8 - 4 - 7 \cdot 2 + 6 \neq 0$

$f(-1) = -2 - 1 + 7 + 6 \neq 0$ ∴

$f(-2) = -16 - 4 + 14 + 6 = 0$ $(x+2)$

$(2x^3 - x^2 - 7x + 6) : (x^2 + x - 2) = 2x + 3$

$-(2x^3 + 2x^2 - 4x)$

$3x^2 - 3x + 6$

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

0

$= x^2 + x - 2$

$f(x) = (2x+3)(x+2)(x-1)$ ☺