

$$\begin{array}{rcl}
 & 3x + 1 & \\
 x^2 - 3x + 2 \bigg| & \begin{array}{r} 3x^3 - 8x^2 + 4x - 1 \\ 3x^3 - 9x^2 + 6x \end{array} & \longleftarrow 3x(x^2 - 3x + 2) \\
 \hline
 & \begin{array}{r} x^2 - 2x - 1 \\ x^2 - 3x + 2 \end{array} & \longleftarrow 1(x^2 - 3x + 2) \\
 \hline
 & x - 3 &
 \end{array}$$