

$$\begin{array}{r}
 \phantom{x^3 + 2x^2 - x - 2} \overline{x - 2} \\
 x^3 + 2x^2 - x - 2 \phantom{000} \overline{) x^4} \phantom{000} - 2 \\
 \phantom{x^3 + 2x^2 - x - 2} \underline{-x^4 - 2x^3 + x^2 + 2x} \phantom{00} \\
 \phantom{x^3 + 2x^2 - x - 2} \phantom{-x^4 - 2x^3 + x^2 + 2x} \phantom{00} \underline{-2x^3 + x^2 + 2x - 2} \\
 \phantom{x^3 + 2x^2 - x - 2} \phantom{-x^4 - 2x^3 + x^2 + 2x} \phantom{00} \phantom{-2x^3 + x^2 + 2x - 2} \underline{2x^3 + 4x^2 - 2x - 4} \\
 \phantom{x^3 + 2x^2 - x - 2} \phantom{-x^4 - 2x^3 + x^2 + 2x} \phantom{00} \phantom{-2x^3 + x^2 + 2x - 2} \phantom{2x^3 + 4x^2 - 2x - 4} \underline{5x^2 - 6}
 \end{array}$$