

$$\begin{array}{r} x^3 - 5x^2 - 2x + 24 : x - 4 = x^2 - x - 6 \\ - x^3 + 4x^2 \\ \hline \phantom{x^3 - } - x^2 - 2x \\ \phantom{x^3 - } x^2 - 4x \\ \hline \phantom{x^3 - } \phantom{x^2 - } - 6x + 24 \\ \phantom{x^3 - } \phantom{x^2 - } 6x - 24 \\ \hline \phantom{x^3 - } \phantom{x^2 - } \phantom{- 6x + } 0 \end{array}$$