

$$\begin{array}{r}
 \phantom{126x^2 + 126)} \frac{1}{126}x + \frac{1}{63} \\
 \hline
 126x^2 + 126) \phantom{00} x^3 + 2x^2 + x + 2 \\
 \phantom{126x^2 + 126)} \underline{-x^3} \phantom{+ 2x^2} \phantom{+ x} \phantom{+ 2} \\
 \phantom{126x^2 + 126)} \phantom{00} 2x^2 \phantom{+ x} + 2 \\
 \phantom{126x^2 + 126)} \phantom{00} \underline{-2x^2} \phantom{+ x} - 2 \\
 \phantom{126x^2 + 126)} \phantom{0000} 0
 \end{array}$$