

$$\begin{array}{r}
 x^2 + 2x + 2 \\
 \hline
 x - 1 \big) \quad x^3 + x^2 - 1 \\
 \quad - x^3 + x^2 \\
 \quad \hline
 \quad \quad 2x^2 \\
 \quad \quad - 2x^2 + 2x \\
 \quad \quad \hline
 \quad \quad \quad 2x - 1
 \end{array}$$