$$\begin{array}{r}
x + 1 \\
x^2 - 2x - 3 \overline{\smash)} x^3 - x^2 - 4x + 4 \\
\underline{x^3 - 2x^2 - 3x} \\
x^2 - x + 4 \\
\underline{x^2 - 2x - 3} \\
x + 7
\end{array}$$