$$\begin{array}{r}
z^2 + z - 6 \\
z - 1 \overline{\smash)} z^3 - 7z + 6 \\
\underline{-z^3 + z^2} \\
z^2 - 7z \\
\underline{-z^2 + z} \\
-6z + 6 \\
\underline{6z - 6} \\
0
\end{array}$$