

$$\begin{array}{r}
 (x^3 - 2x^2 - 5x + 6) : (x + 1) = x^2 - 3x - 2 + \frac{8}{x + 1} \\
 \underline{-x^3 \quad -x^2} \\
 -3x^2 - 5x \\
 \underline{3x^2 + 3x} \\
 -2x + 6 \\
 \underline{2x + 2} \\
 8
 \end{array}$$