$$
\require{enclose}
\begin{array}{r}
x^3 - 4x^2 + 16x \\
x + 4 \enclose{longdiv}{x^4 + 2x - 4} \\
\underline{-(x^4 + 4x^3)} \\
-4x^3 + 2x - 4 \\
\underline{-(-4x^3 - 16x^2)} \\
16x^2 + 2x - 4 \\
\underline{-(16x^2 + 64x)} \\
-62x - 4
\end{array}
$$