$$
\begin{array}{rl|l}
 & x^2+2x+5 & \\
\cline{2-2}
x+1 & x^3+3x^2+7x+5 & \\
 & x^3+x^2 & \longleftarrow x^2(x+1) \\
\cline{2-2}
 & 2x^2+7x+5 & \\
 & 2x^2+2x & \longleftarrow 2x(x+1) \\
\cline{2-2}
 & 5x+5 & \\
 & 5x+5 & \longleftarrow 5(x+1) \\
\cline{2-2}
 & 0 &
\end{array}
$$