

$$\begin{array}{r}
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} x^2 + x + 5 \\
 x^2 - x + 1 \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} \overline{)x^4 + 0x^3 + 5x^2 - 14x + 6} \\
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} x^4 - x^3 + x^2 \\
 \hline
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} x^3 + 4x^2 - 14x \\
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} x^3 - x^2 + x \\
 \hline
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} 5x^2 - 15x + 6 \\
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} 5x^2 - 5x + 5 \\
 \hline
 \phantom{x^2 - x + 1} \phantom{)} \phantom{x^4 + 0x^3 + 5x^2 - 14x + 6} -10x + 1
 \end{array}$$