

$$f = (22013)$$

$$\begin{aligned}
& 2x^4 + 3x^3 + x^2 + 4x + 2 \\
& 2(x+1)^4 + 4(x+1)^2 + 3(x+1) + 3 \\
& 2(x+2)^4 + 2(x+2)^3 + (x+2)^2 + 2(x+2) + 1 \\
& 2(x+3)^4 + 4(x+3)^3 + 2(x+3)^2 + 3(x+3) \\
& 2(x+4)^4 + (x+4)^3 + 2(x+4)^2 + 3(x+4) + 2
\end{aligned}$$

$$f = (44413)$$

$$\begin{aligned}
& 4x^4 + 3x^3 + 3x^2 + 4 \\
& 4(x+1)^4 + 2(x+1)^3 + 3(x+1)^2 + 2(x+1) + 3 \\
& 4(x+2)^4 + (x+2)^3 + (x+2)^2 + (x+2) + 1 \\
& 4(x+3)^4 + 2(x+3)^2 + (x+3) + 4 \\
& 4(x+4)^4 + 4(x+4)^3 + (x+4)^2 + (x+4) + 4
\end{aligned}$$