

$$P(x) = ax^5 + bx^4 + cx^3 + dx^2 + ex + f \tag{1}$$

$$x^2 + x = 10 \tag{2}$$

Multline

$$\begin{aligned} &(a + b + c + d)x^5 + (b + c + d + e)x^4 \\ &\quad + (c + d + e + f)x^3 + (d + e + f + a)x^2 + (e + f + a + b)x \\ &\quad \quad \quad + (f + a + b + c) \end{aligned}$$