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BY THE THEOREM OF UNIQUENESS FOR POLYNOMIALS AS POSTED IN LECTURE NOTES 21,

THERE IS ONLY ONE UNIQUE POLYNOMIAL IN $\mathcal{P}_n = \{a_0 + a_1 x + a_2 x^2 + a_3 x^3 + a_4 x^4 + a_5 x^5\}$

SATISFYING

x	-2	-1	0	1	2	3
$P(x)$	-5	1	1	1	7	25

FROM THE LAGRANGE FORM OF POLYNOMIALS,

$$P(x) = \sum_{n=0}^{5} f(x_n) \cdot l_n(x) = f(x), \text{ FOR } x = \{-2,-1,0,1,2,3\}$$