

On a monomial decomposition of a complex polynomial

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Let $p(z)$ be a complex polynomial of degree n . We study conditions for representing this polynomial as the arithmetic mean of monomials $(z - z_i)^n$, $1 \leq i \leq n$. We prove the corresponding uniqueness and existence result. We also give estimation of the parameters z_i in terms of the coefficients of the given polynomial $p(z)$.