UNICITY RELATION TO ENTIRE FUNCTIONS AND THEIR DIFFERENTIAL DIFFERENCE POLYNOMIALS

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Abstract. In this article, we investigate the problem of sharing values between entire functions f(z) and $f_1(z) = b_{-1} + \sum_{i=0}^{n} b_i f^{(k_i)}(z+i\eta)$ share two distinct values *a* with counted and *b* with ignoring multiplicities, where b_{-1} and b_i $(i = 0, 1, \dots, n)$ are small meromorphic functions of f(z), $k_i \ge 0$ $(i = 0, 1, \dots, n)$ are integers. In relation to previous research, we obtain results that improve and generalise the findings conducted by Yang and Qi [CMFT, 20.1 (2020): 159–178].

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