Further Properties of Certain Subclasses of Multivalent Analytic Functions

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Abstract

In a recent paper, Polatoğlu et al. [Y. Polatoğlu, M. Bolcal, A. Şen and E. Yavuz, An investigation on a subclass of p-valently starlike functions in the unit disc, Turk. J. Math. 31 (2007), 221–228] introduced and investigated a subclass \( M_p(\alpha) \) of multivalent analytic functions, they obtained a representation theorem, a distortion theorem and a coefficient inequality for this class. In the present paper, we derive several other new properties for the class \( M_p(\alpha) \) and an analogous class \( N_p(\alpha) \), such results as coefficient inequalities, integral representations, convolution properties and sufficient conditions for multivalent starlikeness and convexity are obtained. Relevant connections of the results presented here with those obtained in earlier works are also pointed out.

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References


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