HANKEL DETERMINANT FOR FUNCTIONS STARLIKE AND CONVEX WITH RESPECT TO SYMMETRIC POINTS

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ABSTRACT

Sakaguchi (1959) introduced the class of functions $S^*_s$, starlike with respect to symmetric points. In 1977, Das and Singh introduced similar class of functions $C_s$, convex with respect to symmetric points. Here, upper bound for the functional $|a_2a_d - a^2_3|$ is attained for functions $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ belonging to $S^*_s$ and $C_s$. The result obtained is sharp.

Keywords: Starlike with respect to symmetric points; convex with respect to symmetric points; Hankel determinant

References


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