ON RADIUS PROBLEMS FOR SOME SUBCLASSES OF ANALYTIC UNIVALENT FUNCTIONS

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Abstract: In this article we compute the radii of the largest disks for which the functions in the class $\mathcal{S}$ of normalized, analytic and univalent functions belong to certain subclasses of it.

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1. Introduction

Let $\mathcal{A}$ be the class of normalised analytic functions f defined on the open unit disk $\Delta = \{z \in \mathbb{C} : |z| < 1\}$ with Taylor's series expansion of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n \tag{1}$$

and $\mathcal{S}$ denote the subclass of it containing univalent functions [3].