

COEFFICIENT ESTIMATES FOR A NEW SUBCLASS OF
CLOSE-TO-CONVEX FUNCTIONS

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Abstract

Let \mathbb{D} be the unit disk $\{z : |z| < 1\}$, A be the class of functions analytic in D , satisfying the conditions

$$f(0) = 0 \quad \text{and} \quad f'(0) = 1. \quad (1)$$

In this presentation, we will introduce a new subclass of close-to-convex functions denoted by $KQ_g(\lambda, \gamma, A, B)$ with $\gamma \in \mathbb{C} \setminus \{0\}$, $\lambda \in [0, 1]$ and $-1 \leq B < A \leq 1$. Here $g(z)$ is a convex function which satisfies the following conditions.

$$g(0) = 1 \quad \text{and} \quad \operatorname{Re} g(z) > 0 \quad (z \in \mathbb{D}). \quad (2)$$

We will give upper bounds for Taylor coefficients of functions which belong to $KQ_g(\lambda, \gamma, A, B)$. We will obtain some earlier results as special cases of our parameters.

Keywords: Analytic Functions, Close-to-Convex Functions, Coefficients Estimates.

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