

Coefficient properties for the subclasses of convex functions with respect to other points

ABSTRACT

Let \mathcal{S} be the class of functions f which are analytic and univalent in the open unit disc $D = \{z: |z| < 1\}$ given by $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ and a_n a complex number. Let \mathcal{T} denote the class consisting of functions f of the form $f(z) = z - \sum_{n=2}^{\infty} a_n z^n$ where a_n is a non negative real number. In this paper, we introduce 3 subclasses of \mathcal{T} ; $C_s T(\alpha, \beta, \sigma, k)$, $C_c T(\alpha, \beta, \sigma, k)$ and $C_{sc} T(\alpha, \beta, \sigma, k)$, consisting of analytic functions with negative coefficients and are respectively convex with respect to symmetric points, convex with respect to conjugate points and convex with respect to symmetric conjugate points. Here, α and β are to satisfy certain constraints. We obtain coefficient conditions for the above classes.