On functions starlike with respect to symmetric, conjugate and symmetric conjugate points with negative coefficients II

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Abstract

A class $T_S^*(\alpha,\beta,\sigma,k)$ of functions f analytic and univalent in $D=\{z:0<|z|<1\}$ given by $f(z)=z-\sum_{n=2}^{\infty}a_n z^n$ and satisfying the condition

$$\left|\frac{zf'(z)}{f(z)-f(-z)}-k\right|<\beta\left|\frac{\alpha zf'(z)}{f(z)-f(-z)}+(2\sigma-k)\right|,$$

$z\in D, 0\le\alpha\le 1, 0<\beta\le 1, \frac{1}{2}<k<\sigma\le 1$ is introduced and studied. An analogous class $T_c^*(\alpha,\beta,\sigma,k)$ and $T_{sc}^*(\alpha,\beta,\sigma,k)$ is also examined.