

First order differential subordination associated with cassini curve

ABSTRACT

Let p be an analytic function defined on the open unit disc with $p(0)=1$. In this paper, we determine the conditions for such that certain subordination properties hold for $p(z)$ is subjected to certain geometric conditions involving the expressions $1 - \lambda \frac{z p'(z)}{p(z)}$ and $2 - \lambda \frac{z p'(z)}{p(z)}$ of which each is subordinated to $1 - cz$ and the condition for λ is determined.