

Some questions on the univalence of functions of the class Σ

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Abstract

In this paper we give an example of two convex functions in $|\zeta| > 1$ whose arithmetic mean is nonconvex. We calculate the radius of convexity of the sum of two convex functions; it is equal to $\{ \text{Mathematical expression} \}$. For functions $F(\zeta) = \zeta + b/\zeta + \dots$, where $F'(\zeta) = f(\zeta)/\zeta$, if $f(\zeta) = \zeta + a/\zeta + \dots$ is univalent $|\zeta| > 1$, then the radius of univalence is the root of the equation $4E \cdot (1/r)/K(1/r) + 1/r^2 = 3$. © 1976 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF01095440>
