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## Some questions on the univalence of functions of the class $\Sigma$

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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.

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