SOME MONOTONICITY PROPERTIES OF GENERALIZED
ELLiptic INTEGRALS WITH APPLICATIONS

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Abstract. In this paper, we present some monotonicity theorems involving the generalized elliptic integrals $K_a(r)$ and $E_a(r)$, and find an asymptotic property of $K_a(r)$ when $r \to 1$. As applications, some well known results are improved.


Keywords and phrases: Gaussian hypergeometric function, generalized elliptic integrals, monotonicity.

REFERENCES