PARTIAL SUMS OF CERTAIN ANALYTIC FUNCTIONS

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Abstract. Let \( f_n(z) = z + \sum_{k=2}^{n} a_k z^k \) be the sequence of partial sums of the analytic function \( f(z) = z + \sum_{k=2}^{\infty} a_k z^k \). We determine sharp lower bounds for \( \text{Re}\{f(z)/f_n(z)\} \), \( \text{Re}\{f_n(z)/f(z)\} \), \( \text{Re}\{f'(z)/f'_n(z)\} \) and \( \text{Re}\{f'_n(z)/f'(z)\} \) under certain conditions.

MSC 2010. 34C45.

Key words. Analytic, univalent, Hadamard product, Wright generalized hypergeometric functions, partial sum.

REFERENCES


The authors would like to thank the referee for the valuable comments and suggestions.

Received November 17, 2009
Accepted April 22, 2010