

A GEOMETRIC MEAN INEQUALITY AND SOME MONOTONICITY RESULTS FOR THE q -GAMMA FUNCTION

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Abstract. A geometric mean inequality and some monotonicity results for the q -Gamma function are proved.

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REFERENCES

- [1] A. LAFORGIA, S. SISMONDI, *A Geometric Mean Inequality for the Gamma Function*, Bolletino U. M. I. **7** (1989), 339–342.
- [2] D. KERSHAW, A. LAFORGIA, *Monotonicity results for the gamma function*, Atti Accad. Sci. Torino **119** (1985), 127–133.
- [3] M. E. H. ISMAIL, M. E. MULDOON, *Inequalities and Monotonicity Properties for Gamma and q -Gamma Functions*, ISNM Approximation and Computation **119** (1994), 309–323.
- [4] H. MINC, L. SATHRE, *Some inequalities involving $(r!)^{1/r}$* , Proc. Edinburgh. Math. Soc. **14** (1965/66), 41–46.