ON THE APPROXIMATION OF THE EXPONENTIAL FUNCTION BY POLYNOMIALS AND ALGEBRAIC FUNCTIONS

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2000 Mathematics Subject Classification. 26A09, 26D07, 40A30, 41A10

Keywords and phrases. Exponential function, approximation, speed of convergence.

Starting from some older ideas of [3] and [1], we show new facts concerning the approximation of the real exponential by polynomials and related algebraic functions.

REFERENCES

- C. P. Niculescu, A. Vernescu, *Two-sided Estimate of* e, Journal of Ineq. in Pure and Appl. Math., 5 (2004), no. 3, article 55.
- [2] G. Pólya, G. Szegö, Problems and Theorems in Analysis I, Springer-Verlag, Berlin Heidelberg New York, 1978.
- [3] A. Vernescu, *The Number* e and the Mathematics of the Exponential, Publishing House of the University of Bucharest, 2004 (in Romanian).

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