

ON NEW ESTIMATION OF THE REMAINDER IN GENERALIZED TAYLOR'S FORMULA

M. MATIĆ, J. PEČARIĆ AND N. UJEVIĆ

Abstract. We derive some estimations of the remainder in perturbed generalized Taylor's formula and apply them to calculations of the logarithmic function.

Mathematics subject classification (1991): 26D15, 41A58.

Key words and phrases: Taylor's expansion, Grüss type inequalities.

REFERENCES

- [1] M. ABRAMOWITZ AND I. A. STEGUN (Eds), *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series 55, 4th printing, Washington, 1965.
- [2] S. S. DRAGOMIR, *New estimation of the Remainder in Taylor's Formula Using Grüss' Type Inequalities and Applications*, Math. Inequal. Appl. **2** (2) (1999), 183–193.
- [3] J. E. PEČARIĆ, F. PROSCHAN AND Y. L. TONG, *Convex Functions, Partial Orderings, and Statistical Applications*, Academic Press, 1992.