

ON GENERALIZATIONS OF OSTROWSKI INEQUALITY VIA SOME EULER–TYPE IDENTITIES

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Abstract. Some generalizations of Ostrowski inequality are given, by using some Euler-type identities.

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REFERENCES

- [1] A. OSTROWSKI, *Über die Absolutabweichung einer differentiebaren Funktion von ihren Integralmittelwert*, Comment. Math. Helv. **10** (1938), pp. 226–227.
- [2] V. I. KRYLOV, *Approximate calculation of integrals*, Macmillan, New York-London, 1962.
- [3] M. ABRAMOWITZ AND I. A. STEGUN (Eds), *Handbook of mathematical functions with formulae, graphs and mathematical tables*, National Bureau of Standards, Applied Math. Series 55, 4th printing, Washington 1965.
- [4] M. MATIĆ, J. PEČARIĆ AND N. UJEVIĆ, *Improvement and further generalization of some inequalities of Ostrowski-Grüss type*, Computers Math. Applic. **39** (2000), 161–175.
- [5] M. MATIĆ, J. PEČARIĆ AND N. UJEVIĆ, *Generalization of an inequality of Ostrowski type and some related results*, Indian Jour. Math. (to appear).
- [6] S. S. DRAGOMIR AND N. S. BARNETT, *An Ostrowski type inequality for mappings whose second derivatives are bounded and applications*, *The Journal of the Indian Mathematical Society* (submitted)