

Montgomery Identity and Ostrowski Type Inequalities for a new Quantum Integral

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Abstract

In this paper, quantum version of Montgomery identity by applying ${}^b_q\int$ -integral is obtained. By employing the established identity, some new quantum Ostrowski type inequalities are proved. Several special cases of our main results are presented. It is also shown that the results presented in this paper generalize several other well known inequalities given in the existing literature on this subject.

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