Marinković, Sladjana; Rajković, Predrag; Stanković, Miomir
The inequalities for some types of $q$-integrals. (English) Zbl 1165.33308
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Summary: Using the restriction of the $q$-integral over $[a, b]$ to a finite sum and $q$-integral of Riemann-type, we establish new integral inequalities of $q$-Chebyshev type, $q$-Grüss type, $q$-Hermite-Hadamard type and Cauchy-Buniakowsky type. Some inequalities which include the boundaries of functions are also indicated.

MSC:
33D45 Basic orthogonal polynomials and functions (Askey-Wilson polynomials, etc.)
26D15 Inequalities for sums, series and integrals

Keywords:
integral inequalities; $q$-integral; Chebyshev inequality; grüss type inequality; Hermite-Hadamard inequality

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