SHARP LOWER AND UPPER BOUNDS FOR THE $q$–GAMMA FUNCTION

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Abstract. This paper is devoted to provide sharp bounds for the $q$-gamma function from below and above for all $q > 0$ by means of investigating the monotonicity property to analytical functions involving logarithm $q$-gamma function. It turns out that these results refine and improve lower and upper bounds for the $q$-gamma function which have been given by Salem [13].


Keywords and phrases: Inequalities, $q$-Gamma function, $q$-digamma functions, monotonic function.

REFERENCES


