Some inequalities bounding certain ratios of the q-gamma function (RETRACTED)

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ABSTRACT: In this short paper, we established q- analogues of some well-known inequalities for the classical Gamma function and some inequalities bounding the ratio $\Gamma_q(x)/\Gamma_q(y)$, where $\Gamma_q(.)$ is the q-analogue of the Gamma function. The method employed in presenting the results made use of strict logarithmic convexity of a function and classical mean value theorem involving the q-analogue of the psi function. At the end, the proven result provided the q-analogue of some known result concerning the classical Gamma function.

Keywords: Mean value theorem, psi function, q-analogue of the psi function, q-gamma functions, strict logarithmic convexity.

RETRACTION NOTICE

This article has been retracted due to the plagiarism issue raised by Professor Kwara Nantomah, School of Mathematical Sciences, C. K. Tedam University of Technology and Applied Sciences, P. O.B ox 24, Navrongo, Upper East Region, Ghana. The author (Hashimu Mohammed) has failed to respond to the issue.