MONOTONIC FUNCTIONS RELATED TO THE q–GAMMA AND q–TRIGAMMA FUNCTIONS WITH APPLICATIONS

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Abstract. In this paper our aim is to investigate necessary and sufficient conditions for the complete monotonicity properties of some functions related to the q-gamma and q-trigamma functions. As application of this results, some new inequalities are derived. Our results are shown to be as a generalization of results which were obtained by Qi [6].

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