ON EXPONENTIAL CONVEXITY, JENSEN–STEFFENSEN–BOAS INEQUALITY, AND CAUCHY’S MEANS FOR SUPERQUADRATIC FUNCTIONS

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Abstract. In this paper we define new means of Cauchy’s type using some recently obtained results that refine the Jensen-Steffensen-Boas inequality for convex and superquadratic functions [4],[5]. Applying so called exp-convex method established in [8],[9], we interpret results in the form of exponentially convex or (as a special case) logarithmically convex functions. We also present some related results which generalize results in [2].


Keywords and phrases: Jensen-Steffensen inequality, superquadratic functions, Cauchy Means, Monotonicity, exponential convexity, log-convexity.

REFERENCES