

NOTE ON AN INEQUALITY OF GAUSS

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Abstract. In this paper a functional defined as the difference between the left-hand and the right-hand side of an extension of the Gauss inequality given in [H. Alzer, On an inequality of Gauss, Rev. Mat. Complut. 4(2) (1991), 179–183.] is studied. Related analogous of the Lagrange and the Cauchy mean value theorems are obtained. Furthermore, Gauss means are generated and their monotonicity property is proven.

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