

INEQUALITIES AND CONVEXITY PROPERTIES FOR THE WEIGHTED EXPONENTIAL–BETA FUNCTION

FARZAD KHOSROWSHAHI AND SILVESTRU SEVER DRAGOMIR

Abstract. In this paper we establish several analytic inequalities and convexity properties for the Weighted Exponential-Beta function

$$F(\alpha, \beta; \gamma) := \int_0^1 \exp[\gamma x^\alpha (1-x)^\beta] dx,$$

where α , β and γ are positive numbers.

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