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A REMARK ON SCHUR–CONVEXITY OF THE MEAN OF A CONVEX FUNCTION

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Abstract. In this note the new result and some remarks have been made about proving convexity and Schur-convexity of the mean of a convex function $L:[0,1]\to\mathbb{R}$ associated with the Hermit-Hadamard inequality which is considered in literature [4] and [5]:

$$L(t):=\frac{1}{2(b-a)}\int_a^b [f(ta+(1-t)x)+f(tb+(1-t)x)]dx,$$

where $f:I\subseteq\mathbb{R}\to\mathbb{R}$ and $a,b\in I,\ a<b$.

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