WRIGHT–CONVEXITY WITH RESPECT TO ARBITRARY MEANS

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Abstract. Let $I \subset \mathbb{R}$ be an open interval and M, $N : I^2 \longrightarrow I$ be means on I. We give sufficient conditions on means M and N under which every first Baire class solution $f : I \longrightarrow \mathbb{R}$ of the functional inequality

$$f(M(x,y)) + f(N(x,y)) \leqslant f(x) + f(y), \quad x, y \in I,$$

is convex.

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