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WEIGHTED FORM OF A RECENT REFINEMENT OF THE DISCRETE JENSEN'S INEQUALITY

LÁSZLÓ HORVÁTH

Abstract. Recently, Xiao, Srivastava and Zhang (see [10]) have introduced a new refinement of the discrete Jensen's inequality for mid-convex functions. We give and discuss the weighted form of their results. This leads to some new inequlities and limit formulas. We illustrate the scope of the results by applying them to introduce and study some new quasi-arithmetic means.

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