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REFINEMENTS OF SOME INEQUALITIES RELATED TO JENSEN'S INEQUALITY

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Abstract. A finite form of Jensen's inequality for a continuous *convex* function from a topological abelian semigroup to another topological ordered abelian semigroup is given by the author and S.-E. Takahasi. As an application of this abstract Jensen's inequality, two inequalities with respect to geometric mean and arithmetic mean are obtained. The first gives a new refinement of the geometric-arithmetic mean inequality. The second gives a refinement between the arithmetic mean and a certain mean.

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