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AN INEQUALITY FOR A LINEAR DISCRETE OPERATOR INVOLVING CONVEX FUNCTIONS

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Abstract. For the functional $A[f]=\sum_{k=1}^{m} a_k f(z_k)$, we give necessary and sufficient conditions over the real numbers z_k, such that, the inequality $A[f]\geqslant 0$, holds for some classes of convex functions. Then, we deduce an inequality related to Alzer's inequality and a weighted majorization inequality.

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