

## ON AN INEQUALITY FOR CONVEX FUNCTIONS WITH SOME APPLICATIONS ON FRACTIONAL DERIVATIVES AND FRACTIONAL INTEGRALS

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**Abstract.** The main goal of the paper is to state and prove the new general inequality for convex and increasing functions. We introduce some new inequalities by involving some fractional integrals and fractional derivatives of Riemann-Liouville, Canavati, Hadamard and Erdelyi-Kóber type and apply our result to multidimensional setting to obtain new results involving mixed Riemann-Liouville fractional integrals.

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