

## ON STABILITY AND HYPERSTABILITY OF AN EQUATION CHARACTERIZING MULTI-ADDITIVE MAPPINGS

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**Abstract.** In this paper, using the fixed point approach, we prove some stability and hyperstability results for an equation characterizing multi-additive mappings. Our results generalize some known outcomes. In particular, we give a solution of a problem concerning optimality of some estimations.  
**Key Words and Phrases:** Multi-additive mapping, Hyers-Ulam stability, hyperstability, fixed point theorem.

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