SOME RECENT FIXED POINT RESULTS OF F-CONTRACTIVE MAPPINGS IN METRIC SPACES

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Jelena Z. Vujaković, Ljiljana R. Paunović, Olga V. Taseiko

Abstract. The opinion is that the most important result in the metrical theory of fixed points is the famous Banach contraction principle from 1922. It has been generalized and extended in several directions. One of the most interesting extensions was provided by Wardowski in 2012. He described a new contraction, so–called F-contraction and proved that every F-contraction has a unique fixed point, where $F:(0,+\infty)\to(-\infty,+\infty)$ satisfies conditions $(F1)$, $(F2)$ and $(F3)$. Several authors generalized his results by introducing the various types of F-contractions in other general metric spaces. In this paper we established some new fixed point results of F, Suzuki F and (φ,F)-contractive mappings in complete metric spaces. The goal was to improve the already published results but using only property $(F1)$ of strictly increasing mapping F. We believe that our approach significantly improves, complements, generalizes and enriches several known results in current literature.

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