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Some New Results for Jaggi-$\mathcal{W}$-Contraction-Type Mappings on b-Metric-like Spaces

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Abstract: In this article, we generalize, improve, unify and enrich some results for Jaggi-$\mathcal{W}$-contraction-type mappings in the framework of b-metric-like spaces. Our results supplement numerous methods in the existing literature, and we created new approach to prove that a Picard sequence is Cauchy in a b-metric-like space. Among other things, we prove Wardowski's theorem, but now by using only the property ($\mathcal{W}1$). Our proofs in this article are much shorter than ones in recently published papers.

Keywords: Banach principle; Jaggi-$\mathcal{W}$-contractive mapping; Jaggi-$\mathcal{W}$-Suzuki-contractive mapping; fixed point; b-metric-like space

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