



Fixed Point Theorems in Generalized Metric Spaces and Applications

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Abstract

This work investigates fixed point theorems in generalized metric spaces, extending classical contraction principles to broader settings. By employing suitable contractive conditions, sufficient criteria for the existence and uniqueness of fixed points are established. The obtained results generalize several known theorems in the literature and provide a framework for applications to nonlinear problems and differential equations.

Keywords: Metric spaces, fixed point.

References:

- [1] S. Czerwik, Contraction mappings in b -metric spaces. Acta Math. Inform. Univ. Ostraviensis 1 (1993), 5–11.