

Abstract

In this thesis, some proofs of fixed point theorems are presented for independent types of contraction mappings; and, also a generalization of these cases by Ciric's contraction mapping is given. All these results are proved in complete, orbitally complete or chainable orbitally complete G-metric space

Secondly, the concepts of compatible, semi-compatible or weakly commuting are applied to prove common fixed point theorems for two mappings.

Finally, the concept of ω G-distance are presented in this thesis and used to introduce some important results in G-metric space, such as fixed point theorems

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