

Dissertation Title	Geometric Properties of Some Banach Spaces and Fixed Point Theorems for Generalized Contraction Mappings
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Abstract

The purposes of this dissertation are to study geometric properties of some Banach spaces and to introduce some generalized contraction mappings. Also, we prove the geometric properties of some Banach spaces and the existence of fixed point and best proximity point theorems for generalized contraction mappings. The main theorems in this dissertation are divided into three sections. First, we study some geometric properties of Lacunary sequence spaces and generalized Cesàro sequence spaces. Second, we prove fixed point and common fixed point theorems for generalized contraction mappings in modular spaces. Moreover, we also prove fixed point theorems for contractions in modular metric spaces. Finally, we show the existence theorems of best proximity points and common best proximity points for generalized contraction mappings in metric spaces under suitable assumptions.

Keywords : Generalized Contraction Mapping / Best Proximity Point /
Generalized Cesàro Sequence Spaces / Fixed Point /
Geometric Properties / Lacunary Sequence Spaces