

SOME FIXED POINT THEOREMS SATISFYING MEIR-KEELER
TYPE CONTRACTIONS VIA RATIONAL EXPRESSION IN
2-METRIC SPACES

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Abstract

In this paper, we establish some fixed point theorems for Meir-Keeler type contractions via rational expressions and also we obtain some results for mappings satisfying integral type contractions in 2- metric spaces.

Keywords: Fixed Point, Meir-Keeler Type Contraction, 2-Metric Spaces

References

- [1] S. Gähler, 2-metrische raume und ihre topologiche strukture, Math. Nachr. **26** (1963) 953-956.
- [2] A. Meir and E. Keeler, A theorem on contraction mappings, J. Math. Anal. Appl. 28 (1969), 326-329.
- [3] B. K. Dass and S. Gupta, An extension of Banach contraction principle through rational expression, Indian J. Pure Appl. Math. 6 (1975), 1455-1458.
- [4] A. Branciari, A Fixed point theorem for mappings satisfying a general contractive condition of integral type, Int. J. Math. Math. Sci. 29 (2002), 531-536.
- [5] T. Suzuki, Meir-Keeler contractions of integral type are still Meir-Keeler contractions, Int. J. Math. Math. Sci. Vol 2007 (2007), Article ID 39281, 6 pages.

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