
ON SOFT MULTIPLICATIVE NORMED SPACES

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ABSTRACT

In this paper, soft normed spaces is considered with different perspective soft multiplicative norm is defined by using soft points and then convergent sequences, Cauchy sequences are stated in soft multiplicative normed spaces. Some new fixed point theorems are obtained and proved in soft multiplicative normed spaces.

Keywords Soft norm · Multiplicative norm · Soft Fixed point

References

- [1] Molodtsov, D., Soft set theory-first result, Comp. Math. with Appl., 37: 19-31, 1999.
- [2] Maji, P.K., Biswas, R., Roy, A.R., Soft set theory, Comp. Math. with Appl., 45: 555-562, 2003.
- [3] Maji, P. K., Roy, A. R. and Biswas, R., An application of soft sets in a decision making problem, Comput. Math. Appl., 44: 1077-1083, 2002.
- [4] Das, S., Samanta, S. K., Soft real sets, soft real numbers and their properties. J. Fuzzy Math., 20: 551-576, 2012.
- [5] Das, S., Samanta, S.K., Soft metric, Annals of Fuzzy Mathematics and Informatics., 6(1): 77-94, 2013.
- [6] Hosseinzadeh, H. Fixed point theorems on soft metric spaces, Journal of Fixed Point Theory and Applications, 19(2): 1625-1647, 2017.
- [7] Das, S., Majumdar, P., Samanta S.K. On soft linear spaces and soft normed linear spaces. arXiv:1308.1016 [math.GM]. 2013.
- [8] Yazar, M.I, Bilgin,T., Bayramov, S., Aras, Ç. G., A New View On Soft Normed Spaces, International Mathematical Forum., 9(24): 1149-1159, 2014.
- [9] Koparan U. G., Fixed Point Theorems in Soft Normed Spaces, Master Thesis, 2023.
- [10] Bashirov, A., Kurpinar, E., Ozyapıcı, A., Multiplicative calculus and its applications, Journal of Mathematical Analysis and Its Applications, 337(1): 36-48, 2008.
- [11] Ozavsar, M., Cevikel, A.C., Fixed points of multiplicative contraction mappings on multiplicative metric spaces, Journal of Engineering Technology and Applied Sciences, 2(2): 65-79, 2017.

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