

INTUITIONISTIC FUZZY ASPECTS OF MULTIPLICATION N -GROUPS

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Abstract: Intuitionistic fuzzy (IF) sets were first put forward by K. Atanassov as a generalised notation for fuzzy sets in 1983. The concepts of intuitionistic fuzzy near rings, intuitionistic fuzzy N -groups, intuitionistic fuzzy N -subgroups, intuitionistic fuzzy ideals of N -group are described by P. Saikia, L. K. Barthakur and H. K. Saikia in [10, 11]. Fuzzy distributive modules are studied by Sh. B. Semein and I. M. A. Hadi in [4]. Intuitionistic fuzzy multiplication modules are studied by P. K. Sharma in [13]. We extend the notion of intuitionistic fuzzy multiplication modules to intuitionistic fuzzy multiplication N -groups. Here, we define intuitionistic fuzzy multiplication N -group and some basic definitions that are needed in this sequel. The relations ship of multiplication N -groups, intuitionistic fuzzy multiplication N -groups, DN -groups and intuitionistic fuzzy DN -groups are also studied.

Keywords and Phrases: Near rings, N - groups, DN -groups, multiplication DN -