INTERVAL-VALUED (α, β)-FUZZY SUBGROUPS I

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Abstract. Using the "belongs to" relation ($\in$) and quasi-coincidence with relation (q) between fuzzy points and fuzzy sets, the new concept of interval-valued (α, β)-fuzzy subgroup is introduced, where α and β are any of $\{\in, q, \in \vee q, \in \wedge q\}$ with $\alpha \neq \in \wedge q$, and related properties are investigated. We provide characterizations of an interval-valued $(\in, \in \vee q)$-fuzzy subgroup and study their related properties.

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