INTERVAL-VALUED \((\alpha, \beta)-FUZZY\) 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 \((\alpha, \beta)-fuzzy\) subgroup is introduced, where \(\alpha\) and \(\beta\) are any of \(\{\in, q, \in \lor q, \in \land q\}\) with \(\alpha \neq \in \land q\), and related properties are investigated. We provide characterizations of an interval-valued \((\in, \in \lor q)\)-fuzzy subgroup and study their related properties.

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Key words. Interval-valued \((\in, \in \lor q)\)-fuzzy subgroup, \((\in, \in)\)-fuzzy subgroup, \((\in, \in \lor q)\)-fuzzy subgroup, \((\alpha, \beta)\)-fuzzy subgroup.

REFERENCES

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