

On Γ -hyperideals in Γ -semihypergroups

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ABSTRACT.

In this paper, the notion of a Γ -hyperideal of a Γ -semihypergroup is introduced. A Γ -hyperideal of a Γ -semihypergroup is a generalization of an ideal of a semigroup, a generalization of a hyperideal of a semihypergroup and a generalization of a Γ -ideal of a Γ -semigroup. Also, we introduce the classes of bi- Γ -hyperideals and quasi Γ -hyperideals of a Γ -semihypergroup and some properties of them are presented. Moreover, quasi simple Γ -hyperideals and minimal Γ -hyperideals in a Γ -semihypergroup are defined, and we investigate the relation between them.

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Received: 22.10.2009; In revised form: 05.12.2009; Accepted: 08.02.2010

2000 Mathematics Subject Classification. 20N20.

Key words and phrases. Semihypergroup, bi- Γ -hyperideal, Γ -semihypergroup, quasi Γ -hyperideal.