COMPLETELY PRIME HYPERIDEALS OF TERNARY SEMIHYPERGROUPS

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AND

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Abstract

In this article, we introduce the notions of pseudosymmetric hyperideals and globally idempotent ternary semihypergroups and present various examples for them. We prove that if a ternary semihypergroup is globally idempotent, then every maximal hyperideal is a prime hyperideal. Also we study some properties of prime, completely prime and pseudosymmetric hyperideals of a ternary semihypergroup and characterize them. The interrelation among them is considered in ternary semihypergroups.

Keywords: pseudosymmetric, globally idempotent, leftsimple ternary semihypergroup.

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