

ALL COMPLETELY REGULAR ELEMENTS IN $Hyp_G(n)$

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Abstract

In Universal Algebra, identities are used to classify algebras into collections, called varieties and hyperidentities are used to classify varieties into collections, called hypervarieties. The concept of a hypersubstitution is a tool to study hyperidentities and hypervarieties.

Generalized hypersubstitutions and strong identities generalize the concepts of a hypersubstitution and of a hyperidentity, respectively. The set of all generalized hypersubstitutions forms a monoid. In this paper, we determine the set of all completely regular elements of this monoid of type $\tau = (n)$.

Keywords: generalized hypersubstitution, regular element, completely regular element.

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