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GREEN'S RELATIONS ON SUBMONOIDS OF GENERALIZED HYPERSUBSTITUTIONS OF TYPE (n)

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Abstract

A generalized hypersubstitution of type $\tau = (n)$ is a function which takes the n-ary operation symbol f to the term of the same type $\sigma(f)$ which does not necessarily preserve the arity. Let $Hyp_G(n)$ be the set of all these generalized hypersubstitutions of type (n). The set $Hyp_G(n)$ with a binary operation and the identity generalized hypersubstitution forms a monoid. The objective of this paper is to study Green's relations on the set of all regular elements of $Hyp_G(n)$.

Keywords: generalized hypersubstitutions, green's relation, regular elements.

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