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ON PARTIAL CLONES OF *k*-TERMS

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Abstract

The main purpose of this paper is to generalize the concept of linear terms. A linear term is a term in which every variable occurs at most once. K. Denecke defined partial operations on linear terms and partial clones. Moreover, their properties are also studied. In the present paper, a generalized notion of the partial clone of linear terms, which is called k-terms clone, is presented and we also study its properties. We provide a characterization of the k-terms clone being free with respect to itself. Moreover, we attempt to define mappings analogue to the concept of hypersubstitutions.

Keywords: linear term, generalized linear term, superposition of generalized linear term, Menger algebra, hypersubstitution, partial algebra.

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