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PROPERTIES OF (X(YZ))Z WITH LOOP GRAPH VARIETIES OF TYPE (2,0)

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Abstract

Graph algebras establish a connection between directed graphs without multiple edges and special universal algebras of type (2, 0). We say that a graph G satisfies a term equation $s \approx t$ if the corresponding graph algebra A (G) satisfies $s \approx t$. A class of graph algebras V is called a graph variety if $V' = Modg\sum$ where $\sum$ is a subset of $T(X) \times T(X)$. A graph variety $V' = Modg\sum$ is called an (x(yz))z with loop graph variety if $\sum'$ is a set of (x(yz))z with loop term equations. In this paper we characterize all (x(yz))z with loop graph varieties.

Key Words: Varieties, (x(yz))z with loop graph varieties, term, binary algebra, graph algebra.

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