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MAXIMAL B_P-SUBALGEBRAS OF B-ALGEBRAS

Jenette Bantug

Mathematics Department
Silliman University
Dumaguete City, Philippines

e-mail: jenettesbantug@su.edu.ph

and

Joemar Endam

Mathematics Department
Negros Oriental State University
Dumaguete City, Philippines

e-mail: joemar.endam@norsu.edu.ph

Abstract

We provide some properties of maximal B_p-subalgebras of B-algebras. In particular, we show that for each prime p, a finite B-algebra has a maximal B_p-subalgebra. We also show that for a finite B-algebra of order $p^r m$, where $(p, m) = 1$, any two maximal B_p-subalgebras are conjugate and the number of maximal B_p-subalgebras is $kp + 1$ for some $k \in \mathbb{Z}^+$.

Keywords: B-algebras, subalgebras, B_p-subalgebras, maximal B_p-subalgebras.

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