

MAXIMAL B_p -SUBALGEBRAS OF B-ALGEBRAS

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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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