

## PRIME IDEALS OF TRANSITIVE $BE$ -ALGEBRAS

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### Abstract

The notion of prime ideals is introduced in transitive  $BE$ -algebras. Prime ideals are characterized with the help of principal ideals. Prime ideal theorem is stated and derived for  $BE$ -algebras. The concept of minimal prime ideals is introduced in transitive  $BE$ -algebras. A decomposition theorem of proper ideals into minimal prime ideals is derived.

**Keywords:** transitive  $BE$ -algebra, ideal, maximal ideal, prime ideal.

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