ON PSEUDO $BE$-ALGEBRAS

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Abstract
In this paper, we introduce the notion of pseudo $BE$-algebra which is a generalization of $BE$-algebra. We define the concepts of pseudo subalgebras and pseudo filters and prove that, under some conditions, pseudo subalgebra can be a pseudo filter. We prove that every homomorphic image and pre-image of a pseudo filter is also a pseudo filter. Furthermore, the notion
of pseudo upper sets in pseudo $BE$-algebras introduced and is proved that every pseudo filter is an union of pseudo upper sets.

**Keywords:** $BE$-algebra, Pseudo $BE$-algebra, pseudo filter, pseudo upper set.

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**References**


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