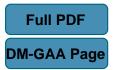
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FOLDING THEORY OF IMPLICATIVE AND OBSTINATE IDEALS IN BL-ALGEBRAS

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Abstract

In this paper, the concepts of *n*-fold implicative ideals and *n*-fold obstinate ideals in *BL*-algebras are introduced. With respect to this concepts, some related results are given. In particular, it is proved that an ideal is an *n*-fold implicative ideal if and only if is an *n*-fold Boolean ideal. Also, it is shown that a *BL*-algebra is an *n*-fold integral *BL*-algebra if and only if trivial ideal {0} is an *n*-fold obstinate ideal. Moreover, the relation between *n*-fold obstinate ideals and *n*-fold (integral) obstinate filters in *BL*-algebras are studied by using the set of complement elements. Finally, it is proved that ideal *I* of *BL*-algebra *L* is an *n*-fold obstinate ideal if and only if $\frac{L}{T}$ is an *n*-fold obstinate *BL*-algebra.

Keywords: BL-algebra, ideal, n-fold implicative ideal, n-fold obstinate ideal.

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