

BI-IDEALS IN k -REGULAR AND INTRA k -REGULAR SEMIRINGS

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Abstract

Here we introduce the k -bi-ideals in semirings and the intra k -regular semirings. An intra k -regular semiring S is a semiring whose additive reduct is a semilattice and for each $a \in S$ there exists $x \in S$ such that $a + xa^2x = xa^2x$. Also it is a semiring in which every k -ideal is semiprime. Our aim in this article is to characterize both the k -regular semirings and intra k -regular semirings using of k -bi-ideals.

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