

ON k -RADICALS OF GREEN'S RELATIONS IN SEMIRINGS WITH A SEMILATTICE ADDITIVE REDUCT

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Abstract

We introduce the k -radicals of Green's relations in semirings with a semi-lattice additive reduct, introduce the notion of left k -regular (right k -regular) semirings and characterize these semirings by k -radicals of Green's relations. We also characterize the semirings which are distributive lattices of left k -simple subsemirings by k -radicals of Green's relations.

Keywords: k -radicals of Green's relations, left k -regular semiring, left k -simple semiring, distributive lattices of left k -simple semirings.

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