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Relatively pseudocomplemented directoids

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Abstract: The concept of relative pseudocomplement is introduced in a commutative directoid. It is shown that the operation of relative pseudocomplementation can be characterized by identities and hence the class of these algebras forms a variety. This variety is congruence weakly regular and congruence distributive. A description of congruences via their kernels is presented and the kernels are characterized as the so-called p-ideals.

Keywords: directoid, relative pseudocomplementation, filter, congruence distributivity, congruence weak regularity
AMS Subject Classification: 06A12, 06D15, 08B10

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