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COMMUTATIVE DIRECTOIDS WITH SECTIONAL INVOLUTIONS*

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Abstract

The concept of a commutative directoid was introduced by J. Ježek and R. Quackenbush in 1990. We complete this algebra with involutions in its sections and show that it can be converted into a certain implication algebra. Asking several additional conditions, we show whether this directoid is sectionally complemented or whether the section is an NMV-algebra.

Keywords: commutative directoid, sectional involution, sectional complement, d-implication algebra, NMV-algebra.

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