

A COMMON APPROACH TO DIRECTOIDS WITH AN ANTITONE INVOLUTION AND D -QUASIRINGS

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Abstract

We introduce the so-called DN -algebra whose axiomatic system is a common axiomatization of directoids with an antitone involution and the so-called D -quasiring. It generalizes the concept of Newman algebras (introduced by H. Dobbertin) for a common axiomatization of Boolean algebras and Boolean rings.

Keywords: directoid, antitone involution, D -quasiring, DN -algebra, α -mutation.

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