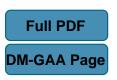
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## NONDISTRIBUTIVE RINGS AND THEIR ÖRE LOCALIZATIONS

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## Abstract

In the paper, we introduce the notion of a nondistributive ring N as a generalization of the notion of an associative ring with unit, in which the addition needs not be abelian and the distributive law is replaced by n0 = 0n = 0 for every element n of N. For a nondistributive ring N, we introduce the notion of a nondistributive ring of left quotients  $S^{-1}N$  with respect to a multiplicatively closed set  $S \subseteq N$ , and determine necessary and sufficient conditions for the existence of  $S^{-1}N$ .

**Keywords:** semigroups, nearrings, nondistributive rings, nearrings of quotients, nondistributive rings of quotients, Öre localizations of nondistributive rings.

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