

# SOME RESULTS ON $BN_1$ -ALGEBRAS

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ABSTRACT.  $BN_1$ -algebras have been introduced by C. B. Kim and H. S. Kim. Here we give an equivalent definition of  $BN_1$ -algebras and show that every  $BN_1$ -algebra is a loop. Moreover we prove that an algebra is  $BN_1$ -algebra if and only if it is a commutative BG-algebra. We also prove that the class of associative  $BN_1$ -algebras coincides with the class of Coxeter algebras. Finally we indicate the interrelationships between  $BN_1$ -algebras and several algebras.