

## QUOTIENT HYPER PSEUDO *BCK*-ALGEBRAS

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### Abstract

In this paper, we first investigate some properties of the hyper pseudo *BCK*-algebras. Then we define the concepts of strong and reflexive hyper pseudo *BCK*-ideals and establish some relationships among them and the other types of hyper pseudo *BCK*-ideals. Also, we introduce the notion of regular congruence relation on hyper pseudo *BCK*-algebras and investigate some related properties. By using this relation, we construct the quotient hyper pseudo *BCK*-algebra and give some related results.

**Keywords:** hyper pseudo *BCK*-algebra, normal hyper pseudo *BCK*-ideal, quotient hyper pseudo *BCK*-algebra.

**2010 Mathematics Subject Classification:** 06F35, 03G25.

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Received 8 March 2013  
Revised 6 September 2013