

Year: 2011

Vol.: 78

Fasc.: 3-4

**Title:** A note on  $n$ -clean group rings

**Author(s):** Angelina Y. M. Chin and Kiat Tat Qua

Let  $R$  be an associative ring with identity. An element  $x \in R$  is clean if  $x$  can be written as the sum of a unit and an idempotent in  $R$ .  $R$  is said to be clean if all of its elements are clean. Let  $n$  be a positive integer. An element  $x \in R$  is  $n$ -clean if it can be written as the sum of an idempotent and  $n$  units in  $R$ .  $R$  is said to be  $n$ -clean if all of its elements are  $n$ -clean. In this paper we obtain conditions which are necessary or sufficient for a group ring to be  $n$ -clean.

**Address:**

Angelina Y. M. Chin  
Institute of Mathematical Sciences  
University of Malaya  
50603 Kuala Lumpur  
Malaysia

**Address:**

Kiat Tat Qua  
Institute of Mathematical Sciences  
University of Malaya  
50603 Kuala Lumpur  
Malaysia