Title: The ordering of idempotents in a finite ring

Author(s): David Dolžan

In this paper we study the ordering of idempotents in a finite ring. We prove that the relation, defined by \( e \leq f \) if and only if \( ef = fe = e \), is well behaved whilst moving to the factor ring modulo the Jacobson radical. We then proceed to explicitly find all idempotents of a semisimple ring that are in a relation with each other and observe some special cases when the infimum of two idempotents is equal to zero.

Address:
David Dolžan
Department of Mathematics
Faculty of Mathematics and Physics
University of Ljubljana
Jadranska 21
SI-1000 Ljubljana
Slovenia