

1096-VJ-1425 **Timothy E Goldberg*** (timothy.goldberg@gmail.com), Lenoir-Rhyne University, LR Box 7141, Hickory, NC 28603. *Algebraic structure in the card game SET*. Preliminary report.

The card game SET has often been studied as a rich source of combinatorial and probabilistic questions, and also as a beautiful and hands-on example of a finite geometry. In fact, SET also possesses an interesting algebraic structure: there is a natural binary operation on the cards in SET, which is commutative but possesses no identity and is not even associative. In this talk, the speaker will describe this algebraic structure and its properties, and show that it is an involutory quandle. The proof of this fact follows largely from an understanding of the geometric structure of SET. This talk should be accessible to an undergraduate audience. (Received September 15, 2013)