1116-VN-1421 **Samuel Gross** and **Joshua Harrington*** (joshua.harrington@cedarcrest.edu), Cedar Crest College, 100 College Drive, Allentown, PA 18104. *Special Numbers in the Ring $\mathbb{Z}_n$.*

In a recent article, Andrzej Nowicki introduced the concept of a special number. Specifically, an integer d is called *special* if for every integer m there exist solutions in non-zero integers a, b, c to the equation $a^2 + b^2 - dc^2 = m$. In this talk we investigate pairs of integers (n, d), with $n \geq 2$, such that for every integer m there exist units a, b, and c in $\mathbb{Z}_n$ satisfying $m \equiv a^2 + b^2 - dc^2 \pmod{n}$. Upon refining a recent result of Harrington, Jones, and Lamarche on representing integers as the sum of two non-zero squares in $\mathbb{Z}_n$, a complete characterization of all such pairs is established. (Received September 19, 2015)