

1135-16-1151

Kendra E Pleasant* (kendra.pleasant@morgan.edu). *Central Sets Theorem in Adequate Partial Semigroups.*

Let S be a nonempty set and $*$ be an associate partial operation on S in the sense that for all x, y, z in S if either $x*(y*z)$ or $(x*y)*z$ is defined then so is the other and they are equal. We define the pair $(S, *)$ to be a partial semigroup. A partial semigroup is said to be *adequate* if for any finite subset, F , of S there exists x in S such that $x*y$ is defined for all y in F . We will prove the Central Sets Theorem in this new setting. (Received September 19, 2017)