Abstract

The concept of m-polar fuzzy positive implicative ideals in BCK-algebras is introduced and related properties are investigated. Characterizations of m-polar fuzzy positive implicative ideals are considered. Relations between m-polar fuzzy ideals and m-polar fuzzy positive implicative ideals are discussed. This thesis focuses on combining the concepts of m-polar fuzzy sets and m-polar fuzzy points to introduce a new notion called m-polar (α, β)-fuzzy positive implicative ideals in BCK-algebras. Moreover, we define m-polar $(\in, \in \vee q)$-fuzzy positive implicative ideals and explore some important properties.