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$f-$DERIVATIONS ON $TM-$ALGEBRAS

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Abstract

Recently an algebra based on proportional calculi was introdued by Tamilarasi and Mekalai in the year 2010 known as $TM-$algebras [3]. Kandaraj and Chandramouleeswaran [5] introduced the notion of derivation on $d-$algebras. In this paper, we introduce the notion of $f-$derivation on $TM-$algebras. We study the properties of regular $f-$derivations on X and prove that the set of all $f-$derivations on a $TM-$algebra X forms a semigroup under a suitable binary composition.

Key Words : *BCK/BCI algebras, $TM-$algebras, Derivations, $f-$derivations.*

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