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A FIXED POINT THEOREM FOR CONE CONVEX CONTRACTIONS OF ORDER $m \geq 2$

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Abstract

In this paper we generalize the notion of cone convex contraction mapping of order 2, to cone convex contraction mapping of order $m(m \geq 2)$ on cone metric spaces and prove a fixed point theorem for cone convex contractions of order m. We also show, through an example that a cone convex contraction of order m may not be a cone convex contraction of order $m-1$.

Key Words : *Cone metric space, Cone convex contraction, Fixed point.*

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