

SOME REMARKS ON CLASS PRESERVING MAPPING OF COEQUALITY RELATIONAL SYSTEMS

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Abstract

The setting of this paper is Bishop's constructive mathematics. We investigate coequality relational systems and characterize class preserving mappings of those systems. A mapping $\gamma : ((A, =, \neq), \neq) \rightarrow ((B, =, \neq), \neq)$ of coequality relational systems is class preserving mapping if $\gamma(a) = \gamma(b)$ holds for each $a, b \in A$. The following result 'A mapping γ is a class preserving mapping if and only if γ and $\text{Ker } \gamma$ permute' is the main result of this paper.

Key Words : Constructive mathematics, Set with apartness, Coequality relation, Coequality relational system, Strong mapping, Strong reverse isotone mapping, Class preserving mapping.