Epimorphisms and Structurally Regular Semigroups

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Abstract

In this paper, we give sufficient condition for any epi to be onto from a structurally (n, m)-regular semigroup. We also prove that in the category of all semigroups epis are onto from any structurally (n, m)-generalised inverse semigroup. Finally we show that the variety of structurally (o, n)-left seminormal bands is saturated in the variety of structurally (o, k)-bands for all $k \geq n$. This shows that in the category of structurally (o, k)-bands epis from structurally (o, n)-left seminormal bands are onto.

Keywords: Dominions, Epimorphisms, Zigzag equations, Absolutely Closed, Saturated, Structurally regular semigroups.