Discussiones Mathematicae
General Algebra and Applications 27 (2007) 109–121
doi:10.7151/dmgaa.1122

THE COMPLETELY DISTRIBUTIVE LATTICE OF MACHINE INVARIANT SETS OF INFINITE WORDS

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Abstract

We investigate the lattice of machine invariant classes. This is an infinite completely distributive lattice but it is not a Boolean lattice. The length and width of it is $\mathfrak{c}$. We show the subword complexity and the growth function create machine invariant classes.

Keywords: Mealy machine, machine invariant class, completely distributive lattice, length, width.

2000 Mathematics Subject Classification: 06D10, 68Q15, 68Q45, 68Q70, 68R15.

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Received 25 April 2006
Revised 6 July 2006