Clifford semigroups edit

Abbreviation: CliffSgrp

Definition 1. A *Clifford semigroup* is an inverse semigroups $\mathbf{S} = \langle S, \cdot, ^{-1} \rangle$ that is also completely regular semigroups.

Definition 2. A *Clifford semigroup* is a structure $\mathbf{S} = \langle S, \cdot, ^{-1} \rangle$ such that

$\cdot$ is associative: $(xy)z = x(yz)$

$^{-1}$ is an inverse: $xx^{-1}x = x$, $(x^{-1})^{-1} = x$

$xx^{-1} = x^{-1}x$, $xx^{-1}y^{-1}y = y^{-1}yxx^{-1}$, $xx^{-1} = x^{-1}x$

Morphisms. Let $\mathbf{S}$ and $\mathbf{T}$ be Clifford semigroups. A morphism from $\mathbf{S}$ to $\mathbf{T}$ is a function $h : S \to T$ that is a homomorphism:

$h(xy) = h(x)h(y)$, $h(x^{-1}) = h(x)^{-1}$

Basic Results.

Examples.

1.

Properties. (description)

Classtype	Variety
Equational theory	
Quasiequational theory	
First-order theory	
Locally finite	No
Residual size	
Congruence distributive	No
Congruence modular	No
Congruence n-permutable	No
Congruence regular	No
Congruence uniform	No
Congruence extension property	No
Definable principal congruences	
Equationally def. pr. cong.	No
Amalgamation property	No
Strong amalgamation property	No
Epimorphisms are surjective	Yes

Finite Members. $f(n) =$ number of members of size n.

$f(1) = 1$
$f(2) =$
$f(3) =$
$f(4) =$
$f(5) =$
$f(6) =$
$f(7) =$

Subclasses.
Groups

Superclasses.
Completely regular semigroups
Inverse semigroups

References

[1]