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commutative semigroup

Canonical name CommutativeSemigroup
Date of creation 2013-03-22 13:08:09
Last modified on 2013-03-22 13:08:09

Owner mclase (549)
Last modified by mclase (549)

Numerical id 4

Author mclase (549) Entry type Definition Classification msc 20M14

Synonym Abelian semigroup Related topic AbelianGroup2 Related topic Commutative

Defines commutative monoid

A semigroup S is *commutative* if the defining binary operation is http://planetmath.org/Comm That is, for all $x, y \in S$, the identity xy = yx holds.

Although the term *Abelian semigroup* is sometimes used, it is more common simply to refer to such semigroups as *commutative semigroups*.

A monoid which is also a commutative semigroup is called a $commutative\ monoid.$