

planetmath.org

Math for the people, by the people.

logical matrix

Canonical name LogicalMatrix

Date of creation 2013-03-22 17:51:18 Last modified on 2013-03-22 17:51:18 Owner Jon Awbrey (15246)

Last modified by Jon Awbrey (15246)

Numerical id 5

Author Jon Awbrey (15246)

Entry type Definition Classification msc 68R01Classification msc 68P15 Classification msc 08A02Classification msc 05C65Classification msc 05B30Classification msc 05B20Classification msc 03E20Classification msc 03B10Synonym Boolean matrix Related topic RelationTheory

Related topic RelationComposition2

Related topic MatrixRepresentationOfRelationComposition

Related topic TriadicRelation
Defines logical matrix

A **logical matrix**, in the finite dimensional case, is a k-dimensional array with entries from the Boolean domain $\mathbb{B} = \{0, 1\}$. Such a matrix affords a matrix representation of a k-adic relation.