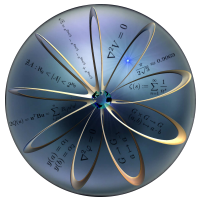

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Ore domain

Canonical name	OreDomain
Date of creation	2013-03-22 11:51:17
Last modified on	2013-03-22 11:51:17
Owner	antizeus (11)
Last modified by	antizeus (11)
Numerical id	11
Author	antizeus (11)
Entry type	Definition
Classification	msc 16S10

Let R be a http://planetmath.org/IntegralDomaindomain. We say that R is a *right Ore domain* if any two nonzero elements of R have a nonzero common right multiple, i.e. for every pair of nonzero x and y, there exists a pair of elements r and s of R such that $xr = ys \neq 0$.

This condition turns out to be equivalent to the following conditions on R when viewed as a right R-module:
(a) R_R is a uniform module.
(b) R_R is a module of finite rank.

The definition of a *left Ore domain* is similar.

If R is a commutative http://planetmath.org/IntegralDomaindomain, then it is a right (and left) Ore domain.