



planetmath.org

Math for the people, by the people.

Ore condition

Canonical name	OreCondition
Date of creation	2013-03-22 14:03:04
Last modified on	2013-03-22 14:03:04
Owner	mclase (549)
Last modified by	mclase (549)
Numerical id	6
Author	mclase (549)
Entry type	Definition
Classification	msc 16U20
Related topic	ClassicalRingOfQuotients
Related topic	OresTheorem2
Defines	Ore ring
Defines	left Ore condition
Defines	right Ore condition
Defines	left Ore ring
Defines	right Ore ring

A ring R satisfies the *left Ore condition* (resp. *right Ore condition*) if and only if for all elements x and y with x regular, there exist elements u and v with v regular such that

$$ux = vy \quad (\text{resp. } xu = yv).$$

A ring which satisfies the (left, right) Ore condition is called a (*left, right*) *Ore ring*.