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Schreier domain

Canonical name	SchreierDomain
Date of creation	2013-03-22 14:50:41
Last modified on	2013-03-22 14:50:41
Owner	CWoo (3771)
Last modified by	CWoo (3771)
Numerical id	7
Author	CWoo (3771)
Entry type	Definition
Classification	msc 13G05
Synonym	pre-Schreier
Defines	pre-Schreier domain

An integral domain  $D$  is a *pre-Schreier domain* if every non-zero element of  $D$  is primal. If in addition  $D$  is integrally closed, then  $D$  is called a *Schreier domain*.

**Remarks.**

1. Every irreducible element of a pre-Schreier domain is prime.
2. A gcd domain is a Schreier domain (a proof of this can be found <http://planetmath.org/ProofThatAGcdDomainIsIntegrallyClosedhere>).