



planetmath.org

Math for the people, by the people.

normal closure

Canonical name	NormalClosure
Date of creation	2013-03-22 13:09:36
Last modified on	2013-03-22 13:09:36
Owner	scanez (1021)
Last modified by	scanez (1021)
Numerical id	5
Author	scanez (1021)
Entry type	Definition
Classification	msc 12F10

Let K be an extension field of F . A normal closure of K/F is a field $L \supseteq K$ that is a normal extension of F and is minimal in that respect, i.e. no proper subfield of L containing K is normal over F . If K is an algebraic extension of F , then a normal closure for K/F exists and is unique up to isomorphism.