



planetmath.org

Math for the people, by the people.

anti-idempotent

Canonical name	Antiidempotent
Date of creation	2013-03-22 13:47:22
Last modified on	2013-03-22 13:47:22
Owner	mathcam (2727)
Last modified by	mathcam (2727)
Numerical id	4
Author	mathcam (2727)
Entry type	Definition
Classification	msc 16U99
Related topic	LinearInvolution

An element x of a ring is called an anti-idempotent element, or simply an anti-idempotent if $x^2 = -x$.

The term is most often used in linear algebra. Every anti-idempotent matrix over a field is diagonalizable. Two anti-idempotent matrices are similar if and only if they have the same rank.