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isogeny

Canonical name	Isogeny
Date of creation	2013-03-22 12:52:07
Last modified on	2013-03-22 12:52:07
Owner	mathcam (2727)
Last modified by	mathcam (2727)
Numerical id	8
Author	mathcam (2727)
Entry type	Definition
Classification	msc 14H52
Classification	msc 14A15
Classification	msc 14A10
Classification	msc 14-00
Synonym	isogenous
Related topic	EllipticCurve
Related topic	ArithmeticOfEllipticCurves

Let E and E' be elliptic curves over a field k . An *isogeny* between E and E' is a finite morphism $f : E \rightarrow E'$ of varieties that preserves basepoints.

The two curves are called *isogenous* if there is an isogeny between them. This is an equivalence relation, symmetry being due to the existence of the dual isogeny. Every isogeny is an algebraic homomorphism and thus induces homomorphisms of the groups of the elliptic curves for k -valued points.