Euler-Fermat theorem

Canonical name	EulerFermatTheorem
Date of creation	2013-03-22 11:45:15
Last modified on	2013-03-22 11:45:15
Owner	Wkbj79 (1863)
Last modified by	Wkbj79 (1863)
Numerical id	11
Author	Wkbj79 (1863)
Entry type	Theorem
Classification	msc 20A05
Classification	msc 20-01
Classification	msc 11-00
Classification	msc 82-00
Classification	msc 83-00
Classification	msc 81-00
Classification	msc 55-00
Classification	msc 18F99
Classification	msc 58Z05
Synonym	Euler's theorem
Related topic	FermatsLittleTheorem
Related topic	FermatsTheoremProof

If $a, n \in \mathbb{Z}$ such that $\gcd(a, n) = 1$, then $a^{\varphi(n)} \equiv 1 \bmod n$, where φ is the Euler totient function.