open mapping theorem

Canonical name	OpenMappingTheorem
Date of creation	2013-03-22 13:12:41
Last modified on	2013-03-22 13:12:41
Owner	Koro (127)
Last modified by	Koro (127)
Numerical id	14
Author	Koro (127)
Entry type	Theorem
Classification	msc 30A99
Classification	msc 46A30
Related topic	ClosedGraphTheorem

There are two important theorems having this .

• In the context of functions of a complex variable:

Theorem. Every non-constant analytic function on a region is an open mapping.

• In the context of functional analysis:

Theorem. Every surjective continuous linear mapping between two Banach spaces is an open mapping.