



## identity theorem of holomorphic functions

Canonical name	IdentityTheoremOfHolomorphicFunctions
Date of creation	2013-03-22 16:47:05
Last modified on	2013-03-22 16:47:05
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Last modified by	rspuzio (6075)
Numerical id	11
Author	rspuzio (6075)
Entry type	Theorem
Classification	msc 30A99
Synonym	rigidity theorem for analytic functions
Related topic	IdentityTheoremOfPowerSeries
Related topic	IdentityTheorem

If the functions  $f$  and  $g$  are holomorphic in a domain  $D$  of the complex plane and the equation

$$f(z) = g(z) \tag{1}$$

is true in an infinite subset  $S$  of  $D$  having an accumulation point  $z_0$  in  $D$ , then (1) is true in the whole  $D$ .

**Remark.** The subset  $S$  may be e.g. some neighbourhood of  $z_0$  or some arc containing  $z_0$ .