

planetmath.org

Math for the people, by the people.

counter example

Canonical name Counterexample

Date of creation 2013-03-22 14:43:00 Last modified on 2013-03-22 14:43:00

Owner rspuzio (6075) Last modified by rspuzio (6075)

Numerical id 5

Author rspuzio (6075) Entry type Definition Classification msc 00A20 A counterexample is an example which is used to prove that a statement is false.

For instance, to disprove that the statement "For all n, $2^{2^n} + 1$ is prime.", one could exhibit 5 as a counterexample; since $2^{2^5} + 1 = 641 \times 6700417$, the statement is false.