

# Review of: "Impossibilities, mathematics, and logic"

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This text seems to have been written for divulgation or educational purposes, and under this assumption I find this revised version quite a nice piece.

The text emphasizes the meaning of mathematical theorems as absolute certainties. It does so with the help of statements of the kind,

$$\neg(\exists x)(x \in X \wedge R(x))$$

which, if true, states that there does not exist any object  $x \in X$  for which the relationship  $R(x)$  is fulfilled, not because any such object has ever been found but because such an object cannot logically exist. The author chose a nice list of examples that clearly makes his point.

In this revised version the author has corrected a squeaking typo that appeared in earlier versions in the statement of the first found counter-example to Euler's sum of powers conjecture. He has also added the two-lines proof, accessible even to young teens, of the non-existence of any rational number whose square equals 2. Maybe, the text could still be improved by adding an explanation of why the natural and rational numbers can be related through a 1-to-1 correspondence, and outlining why the rational and real numbers cannot.