

Re: .999... ?= 1

Source: <http://sci.tech-archive.net/Archive/sci.math/2004-06/1359.html>

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Date: 06/08/04

Date: Tue, 08 Jun 2004 07:20:59 +0100

Herman Jurjus wrote:

>>>> *I see zero having three aspects of equal value but different sign:*
>>>> *minus 0.0 over bar*
>>>> *just zero*
>>>> *plus 0.0 over bar.*
>>>>
> [snip]
>
>>>> *Both the negative and the positive description, from the left and from*
>>>> *the right, respectively are identical with just zero.*
>>>>
> [snip]
>
>> *Do not consider it an attack on*
>> *numbers like 0 and 1 if I try to add some subtleties. Since language of*
>> *mathematics has failed for centuries to satisfactory resolve the*
>> *issue, it might be worth pondering about alternatives. What does +0*
>> *mean? How does it differ from -0? We agree about the identity of their*
>> *value zero, no matter whether it is seen from the left or from the right.*
>
>
> *Do you happen to know the book "Inconsistent*
> *Mathematics", by Chris Mortensen?*

The title sounds interesting. Our library doesn't have it.

> *The function such that $f(x) = 0$ for $x < 0$ and*
> *$f(x) = 1$ for $x > 0$ can be turned (according to the*
> *book) into a _continuous_ function, by defining*
> *both $f(0) = 0$ and $f(0) = 1$.*

That is exactly what practice sometimes needs but gospel-like tenets do not allow.

> *The rather flagrant*
> *contradiction ($0 = f(0) = 1$) is made harmless,*
> *by using a non-standard logic (a 'paraconsistent')*

sci.math: Re: .999... ?= 1

> *logic = logic in which the ex-falso-quodlibet rule*
> *fails).*

If I recall correctly, quodlibet means whatever. People used to obey the ban of division by zero. Why don't they accept that other rules also fail at the infinitely small.

> *They claim this leads to very handy calculus*
> *rules*