Re: ** says: Definition: sum{i in N} i = 0

Source: http://sci.tech−archive.net/Archive/sci.math/2007−07/msg01775.html

- *From*: Virgil <virgil@xxxxxxxxxxx>
- *Date*: Wed, 11 Jul 2007 18:08:07 −0600

In article <1184148654.059994.123760@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,
WM <mueckenh@xxxxxxxxxxxxxxxxx> wrote:

> On 10 Jul., 22:44, Virgil <vir...@xxxxxxxxxxx> wrote:
>
> > In article <1184096471.659205.71...@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,
> >
> > WM <mueck...@xxxxxxxxxxxxxxxxx> wrote:
> >
> > > On 9 Jul., 21:56, Virgil <vir...@xxxxxxxxxxx> wrote:
> >
> > > > Then according to WM, every derivative must always equal 1 at all points, and f(x) = |x| must have a derivative at x = 0, and lots more.
> >
> > > That's nonsense.
> >
> > Maybe, but it is WM's nonsense, not mine, to argue that functions must continuous at points outside their domains.

> Continuous functions must be continuous.
>
> No function is continuous at any point outside its domain of definition, however continuous it may be within that domain.
>
> The derivative of |x| is not
>
> > continuous but −1 for negative x and +1 for positive x. In contrast
> > sinx/x is continuous. Your example fails.
>
> The expression sin(x)/x is not even defined for x = 0, so that WM is claiming that it has a value when it does not have a value.
>
> The function sin(x)/x does not care a damn about your judgement whether it is defined or not at x = 0. It is defined there since 1696 when l'Hospital wrote his book.

If you are trying to say that l'Hospital claimed any more about value of sin(x)/x "at 0" other than that the limit of sin(x)/x, as x approached 0, equals 1, you are wrong.

> Or is it better style to say that it does not give two hoots about your defining it?

My computer knows that sin(x)/x is not defined at x = 0.
Even my calulator knows it. But then, my calculators knows a good deal more of mathematics than WM does.
.