

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

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- *From:* WM <[mueckenh@xxxxxxxxxxxxxxxxxxxxx](mailto:mueckenh@xxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Mon, 02 Jul 2007 22:47:29 -0700
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On 3 Jul., 04:37, "Dik T. Winter" <[Dik.Win...@xxxxxx](mailto:Dik.Win...@xxxxxx)> wrote:

In article <1183010974.179614.181...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx> WM <[mueck...@xxxxxxxxxxxxxxxxxxxxx](mailto:mueck...@xxxxxxxxxxxxxxxxxxxxx)> writes:

> On 28 Jun., 02:35, "Dik T. Winter" <[Dik.Win...@xxxxxx](mailto:Dik.Win...@xxxxxx)> wrote:

>

>>>>

>>>> Depends on the definition of N you are using. Remember Bourbaki.

>>>

>>> Forget them as soon as possible.

>>

>> Why? What is wrong with their books?

>

> The declaration of 0 as a natural number.

Again, nothing more than opinion. Moreover, they are not the only ones who do that.

If you can't see the facts supporting this opinion (discovery of 0 much later than discovery of genuine natural numbers) then further discussion is meaningless.

>> BTW, it is

>> \*not\* CVI but CWI: "Centrum voor Wiskunde en Informatica", or "Centre >> for Mathematics and Computer Science" in translation. And if you >> wonder at the term "Wiskunde", that is one of the many Dutch scientific >> terms used in Dutch as invented by Simon Steving, the man who brought >> decimal fractions to you.

>

> He would rot in his tomb could he see the abuse of his famous > invention.

Yes, especially your abuse.

If you can't see the facts supporting my discovery ( $\lim_{x \rightarrow \infty} P(x)/K(x)$  in the binary tree) then further discussion is meaningless.

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>>>> You are wrong. The identity holds \*if and only if\* the right hand  
>>>> part exists. And in that case the identity is a \*definition\* for the  
>>>> left hand side.  
>>>>  
>>>> We have different opinions. My opinion is: The identity is an identity  
>>>> any case, and your opinion is wrong.  
>>>>  
>>>> In that case you assume identity between something undefined and something  
>>>> well-defined. Good luck.  
>>>>  
>>>> Your assertion is wrong, because an identity implies that both parts  
>>>> are simultaneously defined or both are undefined.  
>>>>  
>>>>  $\text{SUM}_{[n = 1 \text{ to } \infty]} a_n == \text{LIM}_{[k \rightarrow \infty]} \text{SUM}_{[n = 1 \text{ to } k]} a_n$

But in that case there \*must\* be a definition of the left-hand side without  
reference to the right hand side.

The left hand side is an abbreviation of the right hand side.

But whatever, this make  
 $\sum\{n = 1.. \infty\} n$   
undefined because  
 $\lim\{k \rightarrow \infty\} \sum\{n = 1..k\} n$   
is undefined in ordinary mathematics. In H&J the "sum" above is \*not\*  
defined using limits.

$\text{SUM} \{n = 1.. \infty\} n$  is undefined as the result of throwing dice is  
undefined in advance. Nevertheless the result cannot be negative. So  
much logic thinking should be available.  
If you can't see this fact, then further discussion is meaningless.

Regards, WM