

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

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- *From:* WM <mueckenh@xxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Tue, 03 Jul 2007 04:32:18 -0700
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On 3 Jul., 05:08, "Dik T. Winter" <Dik.Win...@xxxxxx> wrote:

In article <1183012627.739093.74...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx> WM <mueck...@xxxxxxxxxxxxxxxxxxxxx> writes:

> On 28 Jun., 03:23, "Dik T. Winter" <Dik.Win...@xxxxxx> wrote:

...

>> You:

>>>>>> And as

>>>>>> every n is not less than 1, the sum of all cannot be less than

>>>>>> ω .

>> Me:

>>>>>> Still lacking proof.

>>>

>>> Still lacking proof that every n is not less than 1?

>>

>> Lack of reading comprehension? It is about the sum.

>

> Every sum $1+2+3+\dots+n$ is less than the sum with as many, namely n 1's.

> (You need proof?)

No. The finite case is clear. For "the sum of all" you need definition, although you do not think so. Within analysis the sum of all is undefined. Within topology the sum can be defined if you compactify the reals, but the result will depend upon the manner of compactification. Within set theory the sum is in general undefined, but can be defined, as I already wrote oh so many articles ago; but at that time you rejected my definition. It is your assumption that a definition in one discipline should be identical to a definition in another discipline leads you astray.

I need not consider disciplines. In mathematics every sum $1+2+3+\dots+n$ is less than the sum with as many, namely n 1's. This immediately leads to the infinite case --- if it exists. Otherwise you could also state that the set given by the axiom of infinity has 0 elements. You may think so, but it is rubbish.

Regards, WM