

Re: $1 - 1/2 + 1/3 - 1/4 + 1/5 - 1/6 + 1/7$

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- *From:* G. Frege <nomail@invalid>
 - *Date:* Tue, 12 Feb 2008 21:42:19 +0100
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On Tue, 12 Feb 2008 14:58:43 +0100, Han de Bruijn
<Han.deBruijn@xxxxxxxxxxxxxxxx> wrote:

Geez! In my *_finitary_* comprehension, the whole thing is sooo obvious !

That does not suffice in mathematics.

PLEEEZE note:

- (1) "Confusion in math can be avoided by stating clear definitions (first) and (then) formulating proofs *_based on that definitions_*."
(G. Frege)
- (2) "Unproven statements carry little weight in the world of mathematics." (Amir D. Aczel)

Therefore I'm *_begging_* you to employ a formalism which is as simple and straightforward as possible

It seems that you've already forgotten what I've said in one of my posts (*sigh*):

"WARNING: It seems to me that you are lacking some prerequisites for this discussion. Hence the following might not be clear at all. Now YOU have to be patient."

Now concerning the notion of */limit/* for sequences of sets, there actually IS a simple formalism. (But do develop that formalism one has to refer to the basic DEFINITIONs mentioned in my other post).

Anyway here is a simple formalism concerning limit for sequences of sets:

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Let  $(E_n)$  be a sequence of sets.

Let

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$A = \bigcup_{n=1}^{\infty} E_n, B = \bigcap_{n=1}^{\infty} E_n.$

$n=1 \quad m=n \quad n=1 \quad m=n$

(UNION... the set theoretic union, SECT... the set theoretic intersection.)

If

$A = B,$

then the limit of  $(E_n)$  exists, and we have

$\lim_{n \rightarrow \infty} E_n = A = B.$

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A simple and clean approach. Remember:

"Everything should be made as simple as possible, but not simpler."

(Albert Einstein) ^^^^^^^^^^^^^^^^^

F.

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