

Re: Relative Cardinality

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- *From:* mueckenh@xxxxxxxxxxxxxxxxxxxx
 - *Date:* 4 Jul 2005 07:01:59 -0700
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Virgil wrote:

>
> Still false for $B = \text{set of irrationals}$ and $A = \text{set of rationals}$.

Obviously $\text{Card}(\mathbb{Q}) \geq \text{Card}(X)$.

>>
>>> Apart from that, cardinality of a set is a property of the number of
>>> elements, and not of their values. So orderedness is not fundamental
>>> to cardinality.

Of course, you are right. But order can help to count the elements. Do you know that Cantor's alephs (which I do not get by my method, perhaps you intermingled these notions with cardinality) can only be defined for well-ordered sets? Although cardinality has nothing to do with order? Do you know that one even introduced the axiom of choice in order to be sure that any consistent set can be well-ordered? In order to get its aleph?

>>
>>> Of course order is not fundamental, but if an order can be established,
>>> then my definition is a sharp criterion to determine whether other
>>> criteria are meaningful.
>
> Except that it is a false criterion.

It is a very fine criterion! Would Kronecker already have seen it, nobody knew set theory today.

> WM's criterion is
> leading to false results and, therefore, it is worthless.

It is an excellent criterion! And I can warmly recommend it to everyone who wants to see instead to believe. Or do you too believe in "glowing is better than knowing"?

If not, then try to find out why it leads to false results (not "that" it does so; I know you do firmly believe that the results are wrong;

but what do you think: why is it so misleading?).

Regards, WM

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- *Follow-Ups:*
 - ◆ **Re: Relative Cardinality**
◇ *From:* Dik T. Winter

 - *References:*
 - ◆ **Re: Relative Cardinality**
◇ *From:* David Kastrup
 - ◆ **Re: Relative Cardinality**
◇ *From:* mueckenh
 - ◆ **Re: Relative Cardinality**
◇ *From:* Virgil

 - Prev by Date: **Re: Cantor and the binary tree**
 - Next by Date: **Re: Relative Cardinality**
 - Previous by thread: **Re: Relative Cardinality**
 - Next by thread: **Re: Relative Cardinality**
 - Index(es):
 - ◆ **Date**
 - ◆ **Thread**