Re: infinity

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- *From*: "David R Tribble" <david@xxxxxxxxxxx>
- *Date*: 14 Oct 2005 10:01:41 −0700

Daryl McCullough said:
>> Yes, it is. The size of a set S is the smallest ordinal alpha
>> such that there is a bijection between S and the set of ordinals
>> less than alpha.
>> That's the *definition* of size.
>

Tony Orlow wrote:
> Try "number of elements". Stick to basics. Remember Occam's Razor.

So let's have _your_ definition, then. It should be razor simple.
The definition given by Daryl may be verbose, but it translates well
into standard mathematical symbols, the '<' symbol in particular.
Does your definition of "set size = number of elements" translate
as well?

You agree that the set of naturals N is infinite.
What do _you_ call the measure of set N? What size is it?

The set of even integers is infinite.
What size is it?

The real points in [0,1] is an infinite set.
What size is it?

The set of all reals, R, is infinite.
What size is it?

The power set of N contains all the possible subsets of N.
What size is it?

The power set of R contains all the possible subsets of R.
What size is it?

The rest of the world has names for all these set sizes (which
we call "cardinalities"). Do you?

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- ***References***:
    - ***Re: infinity***
        - ◊ *From:* Jonathan Hoyle
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        - ◊ *From:* Jonathan Hoyle
    - ***Re: infinity***
        - ◊ *From:* Tony Orlow
    - ***Re: infinity***
        - ◊ *From:* Jonathan Hoyle
    - ***Re: infinity***
        - ◊ *From:* Daryl McCullough
    - ***Re: infinity***
        - ◊ *From:* Daryl McCullough
    - ***Re: infinity***
        - ◊ *From:* Tony Orlow

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