

Re: Well Ordering the Reals

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- *From:* Virgil <ITSnetNOTcom#virgil@xxxxxxxxxxx>
 - *Date:* Thu, 10 Nov 2005 14:31:19 -0700
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In article <MPG.1ddd4db2cd2d268698a6bb@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>, Tony Orlow <aeo6@xxxxxxxxxxx> wrote:

> An enumeration is simply a listing, although usually with some
> ordering. A well ordering appears to be an ordering such that every
> element is comparable with another in a linear order, and every
> subset has a smallest element. This second criterion seems to be at
> odds with the explicit well ordering of any uncountable set as far as
> I can tell.

And TO has amply demonstrated that he cannot tell much.

The empty set cannot have a smallest element. Well ordering requires that every non-empty subset have a smallest element, or equivalently, that the set contain no endlessly strictly descending sequences of elements.

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• **References:**

- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* Robert Low
- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* David Kastrup
- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* Tony Orlow
- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* Daryl McCullough
- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* Randy Poe
- ◆ **Re: Well Ordering the Reals**
 ◇ *From:* Tony Orlow
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