

Re: Cantor Confusion

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On 16 Mrz., 21:18, Virgil <vir...@xxxxxxxxxxxx> wrote:

In article <1174054064.244699.153...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

The function of all cross sections, $f: \mathbb{N} \rightarrow 2^{\mathbb{N}}$, is "continuous" in the sense that never a jump by more than a factor 2 can occur because the nodes of the tree are connected by an untearable network.

Following WM's argument, $g: \mathbb{N} \rightarrow \mathbb{N}$ is even more continuous in that it can never "jump" by a difference of more than 1, so can never become infinite at all.

It does never "become" infinite. This function "is" infinite, i.e., \mathbb{N} is always finite but not bounded.

The domain is the same as the range, namely \mathbb{N} .

The range of $f: \mathbb{N} \rightarrow 2^{\mathbb{N}}$ can never be the same as the domain, unless both are empty.

That is fact, not by claim but by construction of the tree. That's why I constructed it.

A construction which requires \mathbb{N} for both the domain and range of $f: \mathbb{N} \rightarrow 2^{\mathbb{N}}$ is fatally flawed.

You need only consider the number of pairs of parentheses and of unit

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fractions per pair of parentheses in the proof by Oresme.

Regards, WM

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