

Re: Contradiction-free mathematics (The new nonstandard analysis)

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 - *Date:* 31 Jan 2006 14:47:58 -0800
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>A normal number is well-defined because there is a rule for finding every >digit: by choosing it

Is an arbitrary function from \mathbb{N} to \mathbb{N} thus ``known'', because if I know the function I know it's value at each number in the domain?

Put another way: show me a particular normal number that violates the trichotomy law. If the law fails, there are specific numbers that cause it to fail. You claim that you ``know'' the digits of a normal number that makes trichotomy fail, so convince me by telling me what they are.

I bet that whatever example you give me will not actually violate the trichotomy principle...

I assumed that when you said ``computable or known'' you meant ''computable, which means known, ''. There is no accepted axiomatization of the term ``known'', and your three axioms make no attempt to define it. It's no wonder you don't believe there is a contradiction in your system - you never define what any of your terms means.

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