

# Re: Logarithm of transfinite numbers

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Do you ever remove more than one at a time? No. Does the vase become empty? According to you.

So far we understand each other.

So, how many balls were in the vase right before it became empty?

Please define "right before". You can answer that with an Iteration # for some  $n$ , or if you prefer, give me a time  $T$ . Once I know what you mean by "right before", I can happily give you answer.

Yes, you have a contradiction here. According to the gedanken, you must have had  $-9$  balls in order to empty the vase.

The gedanken says nothing of the kind. The only contradiction here is with the false assumption that there is a last iteration before the process ends. And this is a false assumption that you are making, not I. The gedanken, once freed from your erroneous proposition, quite contently and consistently empties all the balls from the bin, one at a time, Ball # $n$  at Iteration # $n$ .

I didn't label the balls. I don't need labels.

No of course you don't! The labels are entirely your undoing here! You want to change the problem and ignore the labels, because you know (whether you wish to admit it publically or not), these labels entirely throw out your whole theory.

You ask about the labels. I say they don't matter. The balls are all labeled '1', okay. It doesn't matter. This is one of many reasons I cannot ascribe to transfinite set theory.

## Re: Logarithm of transfinite numbers

So instead of honestly answering the question as given, with the labels, you choose instead to pretend they don't matter. But if they didn't matter, you wouldn't have a problem answering the questions, would you? They matter all right. They matter so deeply that your house of cards crumbles with their admission. You so desperately want to avoid the labels, but I'm not letting you. If they truly don't matter, then you should be able to answer the damn question.

But you can't, can you? All these many months of posting and hours upon hours of investing yourself into this group, you are finally seeing a flaw, a crack in your armor. You would rather throw out the thought experiment than face the possibility that this past year's postings have all been in vain.

I know you still deeply believe that the growth of  $9^n$  balls per iteration leads to an infinite number of balls at the end. And I know you believe deeply that your system is equi-consistent, at least until recently. But now, you are finding that there are unnatural side-effects to your theory, and it's here that I am asking you to have the courage of your convictions and intellectual courage to honestly answer these tough questions.

Ever vigilant,

Jonathan Hoyle

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