

Re: A physics question about infinity

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- *From:* David W. Cantrell <DWcantrell@xxxxxxxxxxx>
 - *Date:* 25 Apr 2006 16:37:25 GMT
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richard@xxxxxxxxxxxxxxxx (Richard Tobin) wrote:

In article <20060425121535.984\$yH@xxxxxxxxxxxxxxxx>, David W. Cantrell <DWcantrell@xxxxxxxxxxx> wrote:

You're entitled to your opinion, of course. But I see virtually no difference between the care which one must use when dealing with zero and that which one must use when dealing with an infinity in an extended number system. For example, corresponding to the example you gave:

For example, if y might be zero, you can't deduce $x=1$ from $x*y=y$.

Well, with zero, of the four simple arithmetic operations you only have to worry about cancelling in multiplication;

In an extended system, with zero, I'd be loath to say that we don't have to worry about cancelling in division. For example, if y might be zero, you can't deduce $x=1$ from $x/y=1/y$.

with infinity you have to worry about all four.

Yes, what you have to be careful about with zero regarding multiplication/division, you have to be careful about with infinity regarding both multiplication/division and addition/subtraction. But it seems like essentially the same sort of care in all those cases. And we mathematicians are a careful sort anyway.

David

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