Re: Question: Given |X|>0 and |Y|>0, can X x Y be empty?

Source: http://sci.tech−archive.net/Archive/sci.logic/2007−08/msg00130.html

- *From*: Scott <ToaTerra@xxxxxxxxx>
- *Date*: Wed, 08 Aug 2007 23:26:15 −0000

On Aug 8, 3:32 pm, magi...@xxxxxxxxxxxxxxxxx (Arturo Magidin) wrote:

> The problem is you persist in trying to run when people keep pointing
> out to you that you cannot even crawl. You've been told again and
> again that you are extremely defficient in both propositional logic
> and quantifier logic, yet you think you can present a coherent
> argument to "prove ZFC inconsistent" and to contradict Cantor's
> Theorem. It is, in a word, −>ridiculous<−.

Look, I've already pointed this out − I'm simply using Cantor's Theorem as a method to learn more. Everything that someone has pointed out, I 've have incorporated and tried to use in the future. Of course, you can't refute Cantor's Theorem. I've acknowledged that ages ago, but that doesn't mean its not a good vehicle for "re−learning" propositional logic.

>> I've given it some thought and frankly
>> cannot come up with a sensible solution other than asking others where
>> I am deficient.

> But you DO NOT DO THAT. Instead, you present unintelligible

Yes I DO. Look back over the posts and you will see that for each of your recommendations I've tried to apply it going forward.

> You aren't picking "something challenging". You are trying to disprove
> a basic theorem in set theory. Why?

Because there is something fundamental about the proof of Cantor's Theorem that I do not understand and would like to. In this thread, I have two proofs Prop4 and Prop5 (which is flawed as you pointed out). Why, if Cantor's Theorem proves there are no functions with A_f in its range does Prop4 have a function with A_f in its range? I think in my first proof where I tried to connect them made things confusing. (Note: I corrected it based upon your feedback.)

For every function f:S −> P(S), let A_f = { x : in S : x notin f(x) }. Clearly it can be shown that A_f notin range(f). My question has nothing to do with putting f: x |−> p into a subset A_f, because I fully understand A_f content changes based upon f. What I am trying to understand is how it can be claimed that there are no functions with A_f in the range. Example:

S = {1}, P(S) = { 0, {1} }. S x P(S) = { (1,0), (1,{1}) }.
Let f1 = { (1,0) } and f2 = { (1,{1}) }.
Let A_f1 = { x in S : x notin f1(x) } so A_f1 = { 1 }
It follows from CT that there are no functions with A_f1 in its range.
But there is, f2.
Let A_f2 = { x in S : x notin f2(x) } so A_f2 = 0
It follows from CT that there are no functioins with A_f2 in its range. But there is, f1.

I fully understand there are no surjections, I have conceded / understood this long ago. What I don't understand is how CT can claim there are no functions?

> Crankery is, honestly, the only
> plausible explanation at this point.

Look, I told you I'm not a crank (crank = someone posting something to get a reaction out of people or refuses to acknowledge to proofs of others). In a previous post, I've already acknowledge that there is no flaw in the diagonal method and changed my opinion. Please don't confuse my continual use of Cantor's Theorem with not acknowledging what you've said.

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