

# Re: 3rd Experiment |OR| Infinity

---

*Source:* <http://sci.tech--archive.net/Archive/sci.math/2005-10/msg00477.html>

---

- *From:* "Shmuel (Seymour J.) Metz" <[spamtrap@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:spamtrap@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Wed, 05 Oct 2005 23:25:49 -0300
- 

In <1128431365.632517.76130@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>, on 10/04/2005 at 06:09 AM, pfmtjux@xxxxxxxxxx said:

>Obviously this is physically impossible, but you get the idea.

No; you have defined neither an experiment nor a mathematical question.

>which is obviously the same as  $9^n$ . To find how many balls are there  
>in the vase at infinity

What does that mean? You have defined neither a physical experiment nor a mathematical question.

>If you repeat this ad infinitum

What does that mean? You have defined neither a physical experiment nor a mathematical question.

>To find how many balls are there in  
>the vase at infinity (or as we approach infinity, as you prefer)

First you have to define what you mean by that.

>we take the following limit:

That will tell you what the limit is; it won't answer unrelated questions.

>Well, if you don't simplify  $10^n - 1^n$ , you get with an expression  
> $\infty - \infty$

No you don't.

>and which I believe to be the hidden cause of the debate.

The cause the debate is not hidden. The cause of the debate is the refusal to use precise language and to consistently use the same

definitions for words throughout the argument. The cardinality of a set has nothing to do with the limit of an unrelated sequence.

--

Shmuel (Seymour J.) Metz, SysProg and JOAT <<http://patriot.net/~shmuel>>

Unsolicited bulk E-mail subject to legal action. I reserve the right to publicly post or ridicule any abusive E-mail. Reply to domain Patriot dot net user shmuel+news to contact me. Do not reply to spamtrap@xxxxxxxxxxxxxxxxxxxxxx

---

• **References:**

- ◆ **3rd Experiment |OR| Infinity**  
◇ From: Joubin Houshyar
- ◆ **Re: 3rd Experiment |OR| Infinity**  
◇ From: pfntjux

- Prev by Date: **mirror object.**
- Next by Date: **Re: finite group of odd order has no nontrivial element conjugate to its inverse**
- Previous by thread: **Re: 3rd Experiment |OR| Infinity**
- Next by thread: **Re: Fault-tolerant telephone trees**
- Index(es):
  - ◆ **Date**
  - ◆ **Thread**