

Re: November 25 is Infinite Clause day!!

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> > *An infinite number of people toss a coin infinite times each.*
> > *Can you guarantee a new sequence of Heads and Tails?*

the smarter people of the group can't see this is a well formed question but 20 others have answered it.

> > *Can you guarantee a new sequence of Heads and Tails?*

> *This is simply meaningless. There are AN INFINITE NUMBER OF sequences of heads and tails being generated here (one for each tosser).*
> *They could all be the same. They could all be different. The*

then assume the worst case, because you HAVE to make a unique sequence, that is, you cannot rely on some pattern forming in the set that "allows" you to find a unique sequence. You have a problem that the output is unknown, and you have a problem understanding why you need a guarantee. Guarantee means for ANY possible set.

> *In the first place, there are not now*
> *nor will there ever be an infinite number of people in the world.*
> *In the second place, even if there WERE an infinite number of people*
> *in the world, the number of sequences-of-flips is a much BIGGER*
> *infinity than that, so the probability of any particular sequence*

Just read it as, assume an infinite list of binary number expansions from 0.000... to 0.11111..

> *occurring AT ALL (as 1 flipper's) IS 0. "Guarantee" a "new" sequence??*
> *EVERY INDIVIDUAL flipper's sequence is "new"! It will CERTAINLY,*
> *EVENTUALLY, be a sequence that NOBODY HAS EVER EVEN THOUGHT ABOUT*
before!

That is the fake infinity that Cantors rubbish forces you to believe. There is no logical reason why 2 different people can't flip the same side of a coin again and again. You say any sequence is P=0 then in the next breath say they certainly exist.

When 100 people have tossed coins for a while, to get a complete new sequence it must be longer than $\log(100)$ tosses, because

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When 1,000,000 people have all tossed coins for a while, your UNIQUE SEQUENCE must be even longer, around 15 digits long for a high confidence of it being unique.

As the number of people $\rightarrow \infty$, to toss a unique sequence it must be longer_than_log(S) as $S \rightarrow \infty$. Sure you're up to it?

Herc