

Re: just 5 quick answers then I can summarise and GO

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From: ken quirici (kquirici_at_yahoo.com)

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george wrote:

The subject line is laughable.

> *The only quick answer to a stupid (and stupidly formed)*

> *question is "that's a stupid question". All substantive*

There might be it seems to me an interesting or semi-interesting question in that first post, assuming the strings of digits in the (B)string are, or become after some finite time, sequences of repeating groups of digits. For example, in the following string of digits, where the '/' shows where the repeating group repeats, one of the (B) strings could be

.....1254980894/1254980894/.....

The question is, maybe, what is the longest string of digits in pi (or any irrational) that is a group of digits repeated 'n' times?

There might be a number-theoretic issue here – how 'rational' can an irrational sequence of digits get? There doesn't seem to be any other issue since it seems clear that there can't be an INFINITE repeating string in the decimal representation of pi. If there were, it would take up all but a finite part of pi, and so pi would be rational. This is true I think but the proof eludes me.

Maybe this: let n be the digit at which a group starts that repeats an infinite number of times. Let p be the digit at which the group stops repeating. But since the group repeats an infinite number of times, p will occur in the middle of the repetitions. That ok?

Thanks.

Ken