## There Is No Largest Prime Number

With an introduction to a new proof technique

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lambda.co.at: Highly-Available, Scalable & Secure Distributed System:

Venue - 01/01/1970

its roof of the Main Theorem

# There Is No Largest Prime Number

The proof uses reductio ad absurdum.



#### Theorem

There is no largest prime number.

### Proof.

- 1. Suppose  $\boldsymbol{p}$  were the largest prime number.
- 2. Let  $m{q}$  be the product of the first  $m{p}$  numbers
- 3. Then q+1 is not divisible by any of them
- 4. Thus q+1 is also prime and greater than p.

#### Thanks for your patience. Are there any questions?

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7CB6 197E 385A 02DC 15D8 E223 E4DB 6492 FDB9 B5D5