THERE IS NO LARGEST PRIME NUMBER

A Proof by Reduction to Absurdity

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There Is No Largest Prime Number

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.[1]
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.[2]

[1] An example footnote.

[2] A second example footnote.

Itemised Lists With Columns

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- One point
- Another point
- And a **third**!