

The Life and Times of Times of Life

October 5th 2018



There Is No Largest Prime Number

1. Suppose *p* were the largest prime number.

4. But q + 1 is greater than 1, thus divisible by some prime number not in the first p numbers.



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.
- 4. But q + 1 is greater than 1, thus divisible by some prime number not in the first p numbers.



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.
- 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.