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There Is No Largest Prime Number With an introduction to a new proof technique

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Results Proof of the Main Theorem Results

Proof 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 *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. Thus q + 1 is also prime and greater than p.

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