

The Proof of Nothing

Some subtitle

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Introduction

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Consider $p + 1$.
3. $p + 1$ is greater than p , thus not prime.
4. But $p + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

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.
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

The proof uses *reductio ad absurdum*.

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.
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.

A longer title

* one

* two¹

¹the number 2

Itemize

- * Here you can see an itemization
 - * It has items
 - * The items are below each other

Plain frame with title

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