

Northwestern

There Is No Largest Prime Number

Euclid of Alexandria euclid@alexandria.edu

27th International Symposium of Prime 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.

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.

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.

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
- two



Section Example

Box Examples (Default)

You can use the Beamer default blocks in the usual way:

Main Block

This is an example block

Alert Box

This is an alert box

Example Box

This is an example box

Box Examples (tcolorbox)

You can also use tcolorbox style blocks with the facet pattern instead of the default beamer blocks.

T Block Title

This is a tcolorbox style block.

T Alert Title

This is a tcolorbox style alert block.

T Example Block Title

This is a tcolorbox style example block.

Box Examples (tcolorbox) - Facet Blocks

There is also a special block called `tfacetbox` which allows you to specify the color. This only works with non-primary (not red, green, or blue) colors, as you can't shade those easily.

T Block Title

This is a `tfacetbox` block.

Standout Slide