



University  
of Stavanger

# There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Euclid of Alexandria <euclid@alexandria.edu>

Musaeum of Alexandria

27th International Symposium of Prime Numbers; August 26, 2020

# Table of Contents

- 1 Some Examples
  - Paragraphs
  - Lists in Columns with Overlay Specifications
  - Text Blocks
  - Citations and Footnotes
- 2 More Examples
  - Figures
  - Tables
  - Mathematics and Equations
  - Code Blocks

# Paragraphs

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis.

# Lists in Columns with Overlay Specifications

The first slide only has bullet points. The second slide has bullet points and numbered lists. Both slides are in the same frame and have the same frame number at the bottom right.

- Nulla malesuada porttitor diam.
- Donec felis erat, congue non, volutpat at, tincidunt tristique, libero.
  - Phasellus adipiscing semper elit.
  - Maecenas lacinia.

# Lists in Columns with Overlay Specifications

The first slide only has bullet points. The second slide has bullet points and numbered lists. Both slides are in the same frame and have the same frame number at the bottom right.

- Nulla malesuada porttitor diam.
- Donec felis erat, congue non, volutpat at, tincidunt tristique, libero.
  - Phasellus adipiscing semper elit.
  - Maecenas lacinia.

- ① Vivamus viverra fermentum felis.
- ② Donec nonummy pellentesque ante.
  - ① Proin fermentum massa ac quam.
  - ② Sed diam turpis, molestie vitae, placerat a, molestie nec, leo.

# Text Blocks

## Block

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices.

- Lorem ipsum dolor sit amet, consectetur adipiscing elit.

## Example Block

In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis.

- Nunc elementum fermentum wisi.

## Alert Block

Vivamus quis tortor vitae risus porta vehicula.

- Nunc vitae tortor. Proin tempus nibh sit amet nisl.

# Citations and Footnotes

These are some inline citations:

Article [1]. Online [2]. Book [3]. Thesis [4]. Report [5]. Proceedings [6].

Use `\nocite` to display sources in the list of references without in-text citation.

This is an example footnote<sup>1</sup>.

---

<sup>1</sup>Footnote!

# Table of Contents

1

## Some Examples

- Paragraphs
- Lists in Columns with Overlay Specifications
- Text Blocks
- Citations and Footnotes

2

## More Examples

- Figures
- Tables
- Mathematics and Equations
- Code Blocks



# Figures

An example figure (Figure 1).



**Figure 1:** Eurasian tree sparrow (*Passer montanus malaccensis*), adult male, in Kuala Lumpur, Malaysia. Taken on 31 January 2019, 15:20:47 by Peter P. Othagoer, Wikimedia Commons, CC BY 4.0.

# Figures

## Side-by-Side

The same as before, but the second image has been flipped horizontally (Figure 2).



**Figure 2:** Eurasian tree sparrow (*Passer montanus malaccensis*), adult male, in Kuala Lumpur, Malaysia. Taken on 31 January 2019, 15:20:47 by Peter P. Othagoer, Wikimedia Commons, CC BY 4.0.

# Tables

An example table (Table 1).

**Table 1:** A table containing data from the sample long table by LianTze Lim, Overleaf, CC BY 4.0.

First column	Second column	Third column
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778
One	abcdef ghijklmn	123.456778

# Mathematics and Equations

Here's an example inline equation:  $e^{i\pi} + 1 = 0$ . Some example equations are shown in Equation 1, Equation 2, and Equation 3.

$$\int x^n dx = \frac{1}{n+1} x^{n+1}, \quad n \neq -1 \quad (1)$$

$$\sin \frac{\beta}{2} = \sqrt{\frac{1 - \cos \beta}{2}} \quad (2)$$

$$\begin{bmatrix} n+1 \\ m+1 \end{bmatrix} = \sum_k \binom{n}{k} \begin{bmatrix} k \\ m \end{bmatrix} = \sum_{k=0}^n \begin{bmatrix} k \\ m \end{bmatrix} (m+1)^{n-k} \quad (3)$$

# Code Blocks I

## Python

```
import os
import errno
# create directory if it doesn't already exist
fpath = 'data/'
try:
    os.makedirs(fpath)
except OSError as exception:
    if exception.errno != errno.EEXIST:
        raise
    else:
        print('\nBE CAREFUL! Directory %s already exists.' % fpath)
```

# Code Blocks II

## Shell

```
#!/bin/sh
```

```
# change to home directory
```

```
cd $HOME
```

```
# delete all lines containing string in file
```

```
grep -v "string to delete" file.txt > tempfile.txt
```

```
# rename file
```

```
mv tempfile.txt file.txt
```

# Thank you for your attention!

Copyright (c) 2020 Euclid of Alexandria <euclid@alexandria.edu>.



Except where otherwise noted, the contents of this presentation are licensed under a Creative Commons Attribution 4.0 International license (CC BY 4.0)

<[creativecommons.org/licenses/by/4.0](https://creativecommons.org/licenses/by/4.0)>.

# References I

- [1] E. Sigfridsson and U. Ryde. “Comparison of methods for deriving atomic charges from the electrostatic potential and moments”. In: *Journal of Computational Chemistry* 19.4 (1998), pp. 377–395. DOI: 10.1002/(SICI)1096-987X(199803)19:4<377::AID-JCC1>3.0.CO;2-P.
- [2] CTAN. *The Comprehensive TeX Archive Network*. 2006. URL: <http://www.ctan.org> (visited on Oct. 1, 2006).
- [3] Aristotle. *De Anima*. Ed. by R. D. Hicks. Cambridge: Cambridge University Press, 1907.
- [4] I. de Geer. “Earl, Saint, Bishop, Skald – and Music. The Orkney Earldom of the Twelfth Century. A Musicological Study”. PhD thesis. Uppsala: Uppsala Universitet, 1985.
- [5] J. Padhye, V. Firoiu, and D. Towsley. *A Stochastic Model of TCP Reno Congestion Avoidance and Control*. Tech. rep. 99-02. Amherst, Mass.: University of Massachusetts, 1999.
- [6] P. Moraux. “Le *De Anima* dans la tradition grècque. Quelques aspects de l'interpretation du traité, de Theophraste à Themistius”. In: *Aristotle on Mind and the Senses*. Proceedings of the Seventh Symposium Aristotelicum (1975). Ed. by G. E. R. Lloyd and G. E. L. Owen. Cambridge: Cambridge University Press, 1979, pp. 281–324.



# References II

## Further Reading

- [7] A. Angenendt. “In Honore Salvatoris – Vom Sinn und Unsinn der Patrozinienkunde”. In: *Revue d'Histoire Ecclésiastique* 97 (2002), pp. 431–456, 791–823.
- [8] A. van Gennep. *Les rites de passage*. Paris: Nourry, 1909.
- [9] *The New Encyclopædia Britannica*. Ed. by W. E. Preece. 15th ed. 32 vols. Chicago, Ill.: Encyclopædia Britannica, 2003.