

THIS IS THE TITLE

JOHN DOE (FEBRUARY 8, 2026)

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1 This is the first section

hello world

Go to my website and look for latex.pdf. If you have questions about L^AT_EX you can chat on CCCS discord server.

Here's a definition:

Definition 1.1. A **prime** p is an integer greater than 1 that is divisible only by 1 and p . prime

Here's a lemma:

Lemma 1.1. *If p is a prime and $p \mid ab$ where a, b are integers, then $p \mid a$ or $p \mid b$.*

For important lemma with names, do this:

Lemma 1.2. (Euclid's lemma) *If p is a prime and $p \mid ab$ where a, b are integers, then $p \mid a$ or $p \mid b$.*

Here's a theorem:

Theorem 1.1. (Fermat 1640) *Let p be a prime. Then p is a sum of squares iff $p = 2$ or $p \equiv 1 \pmod{4}$.*

Here's a corollary and how to write proof.

Corollary 1.1. *If p is a prime and $p \mid n^2$, then $p \mid n$.*

Proof. By Euclid's lemma with $a = b = n$, since $p \mid n^2 = ab$, then $p \mid a = n$ or $p \mid b = n$. Hence $p \mid n$. □

Here's an example:

Example 1.1. 2 is a prime.

Here's how you create a reference:

Theorem 1.2. *If $E = mc^2$, then m is a prime.* □

The above Theorem [1.2](#) is wrong. You can also access the page number: the above Theorem [1.2](#) (page [3](#)) is wrong.

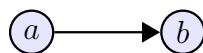
2 This is the second section

One very helpful linux command is `find`. The following runs through the file system recursively starting with `.` and prints all occurrences of `"hello"`:

```
find . -name '*.tex' -exec grep hello {} -nH \;
```

3 Pictures

The `latextool_basic.py` and `latexcircuit.py` is a library I wrote for drawing latex diagrams. Talk to me to get the doc.



Go to my website and look for `latextool.pdf`.

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