

SUNQUAR_{TE}X Example - enpre

Subtitle Here

sun123zxy

SUNQUAR_{TE}X

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¹Last modified on 2024-02-22.

long **long** long long long *long long long* long long long long long long long
long long long long long long long long long long long sentence.

long long long long long long long long long long long long long long long
long long long long long long long long long long long long paragraph.

- left bar.
- narrow narrow
narrow narrow
narrow narrow
narrow narrow
narrow narrow
narrow narrow
left bar.
- right bar.
- wide wide wide wide wide wide wide wide
wide wide wide wide wide wide wide wide right
bar.

Lists

- This is a list.
- A compact list.

Wow.

- This is a list.
- A sparse list.

A definition list below.

Reflexivity $a \sim a$

Antisymmetry $a \leq b \wedge b \leq a \implies a = b$

Transitivity $a \leq b \wedge b \leq c \implies a \leq c$

Blah [Tai+, 1, chapter 3, sec. 2, theorem 3]. Blah blah [Tai+; TP]. Blah
blah blah².

²This is a footnote

```
#include<bits/stdc++.h>
using namespace std;

int main(){
    return 0; // 返回 0
}
```

```
example : ( $\forall x, p x \rightarrow r$ )  $\rightarrow$  (( $\exists x, p x$ )  $\rightarrow r$ ) := by
  intro h ⟨a, hpa⟩ -- you may also 'rcases' explicitly
  exact h a hpa
```

Tables

$L_i \times C_j$	2	\mathbb{N}	\mathbb{R}
2	4	\mathbb{N}	\mathbb{R}
\mathbb{N}	\mathbb{N}	\mathbb{N}	?
\mathbb{R}	\mathbb{R}	?	\mathbb{R}

(a) Products

$L_i^{C_j}$	2	\mathbb{N}	\mathbb{R}
2	4	\mathbb{R}	$2^{\mathbb{R}}$
\mathbb{N}	\mathbb{N}	?	?
\mathbb{R}	\mathbb{R}	?	?

(b) Powers

Table: Several results on cardinality

Referable Table 1a.

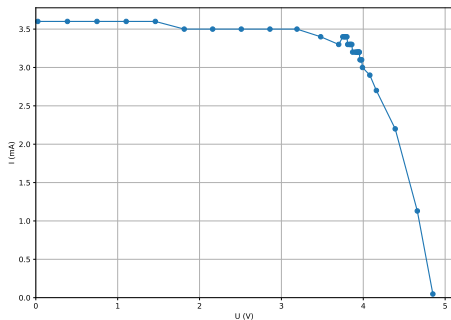
The logo for SUNQUARTeX, featuring the text "SUNQUARTeX" in a large, black, serif font. The letters are slightly shadowed, giving them a 3D appearance as if they are floating above the white background.

Figure: This is a figure

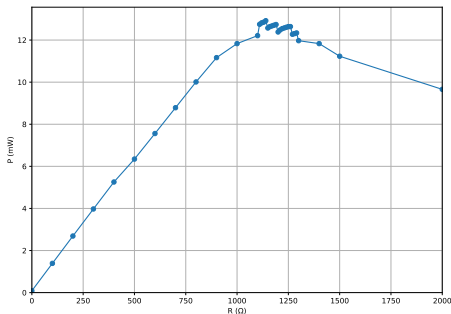
Referable Figure 1.

Computations

Complex side by side. (Figure 2, Figure 2a, Figure 2b)



(a) I-U



(b) P-R

Figure: solar panel

Theorems I

Theorem (Test)

This is a theorem.

$$\sum_{d|n} \varphi(d) = n$$

Proof.

This is a proof ended with a display math.

$$\sum_{d|n} \mu(d) = [n = 1]$$



Theorems II

Proof.

This is a really really really really really really really really really really
really really really really really really really really really long proof. □

Theorem 6.7. Let $\alpha \in [0, 1]$. Then there exists a function $f_\alpha : \mathbb{R}^n \rightarrow \mathbb{R}$

Definition

This is a definition.

Example (An example)

This is an example.

Solution

This is the solution to the example.

Theorems III

Exercise

This is an exercise.

Remark

This is a remark of Exercise 1.

Lemma

This is a lemma.

Corollary

This is a corollary of Theorem 2.1.

Theorems IV

Proposition

This is a proposition.

Conjecture

This is a conjecture.

References I

- [Tai+] Y Taigman et al. “Closing the gap to human-level performance in face verification. deepface”. In: *Proceedings of the IEEE Computer Vision and Pattern Recognition (CVPR)*. Vol. 5, p. 6.
- [TP] M. Turk and A. Pentland. “Eigenfaces for Recognition”. In: *Journal of Cognitive Neuroscience* 3.1 (), pp. 71–86.