

# SUNQUAR<sub>TeX</sub>-enpre Test

Subtitle Here

sun123zxy

SUNQUAR<sub>TeX</sub>

2024-02-22<sup>1</sup>

---

<sup>1</sup>Last modified on 2024-02-22.

# Texts

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 blah<sup>2</sup>.

---

<sup>2</sup>This is a footnote

# Code

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

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

# 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.

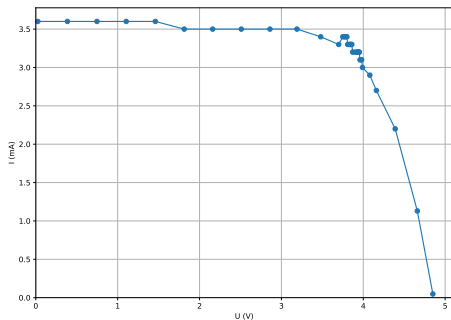
The logo for SUNQUARTeX is displayed in a large, black, serif font. The letters are bold and have a slight 3D effect with a shadow. The 'Q' and 'A' are particularly stylized, with the 'Q' having a thick, rounded body and the 'A' having a wide, flat base. The 'e' is lowercase and has a small, elegant tail. The 'X' is also bold and has a distinctive shape with a wide base and a sharp point at the top.

Figure: This is a figure

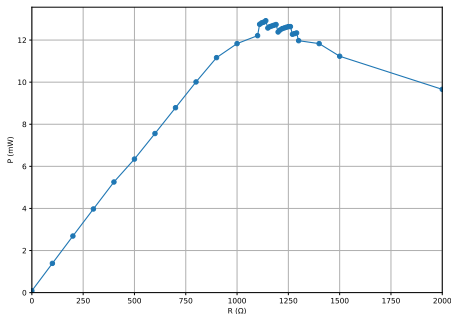
Referable Figure 1.

# 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 6.10. Let  $\sigma \in S_n$ . Then  $\text{sgn}(\sigma) = (-1)^{\ell(\sigma)}$ .

## 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.