

LATEX WORKSHEET

CCNY AWM

1. SECTION TITLE

1.1. **Subsection Title.** Some plain text. *Some italic text.* **Some bold text.**

a) The first item.

b) The second item.

- The first item.
- The second item

	col1	col2
row1	cell1	cell2
row2	cell3	cell4

TODO

TODO: triangle TODO: lattice

Theorem 1.1 (Theorem Name). *Theorem statement.*

Proof. A Proof.

□

Definition (Term). Definition statement.

Here's an inline math equation: $f : X \rightarrow Y$.

$$g : X \rightarrow Y$$

$$h : X \rightarrow Y$$

$$\begin{aligned}(a + b) + (c + d) &= ((a + b) + c) + d \\ &= (a + (b + c)) + d \\ &= a + ((b + c) + d) \\ &= a + (b + (c + d))\end{aligned}$$

$$||a+b|| \leq ||a|| + ||b|| \tag{1}$$

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$

$$f(x)=\begin{cases} 1, & \text{x rational} \\ 0, & \text{x irrational} \end{cases}$$

$$\det(A) = \sum_{\sigma \in S_n} \operatorname{sgn}(\sigma) \left(\prod_{i=1}^n \alpha_{i,\sigma(i)} \right)$$

TODO