

L^AT_EX Template

Homework 1

Solutions written by [Name]

EXERCISE 1. Prove something.

Proof. This is a proof. □

Remark 1. *The above was a proof.*

Definition 1. *This is a definition.*

Theorem 1. *This is a theorem.*

Proof. This is a proof of the above theorem.

Lemma 1. *Theorems are almost always followed by a proof.* □

Corollary 1. *Proofs are fun to write.*

This is framed text. You can put something important inside here.

Here is some **red text**. We can also use **orange text**, or possibly **blue text**. How about **purple text**?

Here is an inline equation: $\sum_{i=0}^n i = \frac{n(n+1)}{2}$. Did you know I can type in `courier`?

Here is a piecewise function:

$$|x| = \begin{cases} x & \text{if } x > 0 \\ 0 & \text{if } x = 0 \\ -x & \text{if } x < 0 \end{cases}$$

Here is a matrix:

$$\mathbf{A} = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$

Here is a list:

- Here is an item.
- Here is another item.

Here is a *numbered* list:

1. Here is an item.
2. Here is another item.