

## Homework Set 1: (Lab 1, part 1)

This set of homework problems is designed to get you to look in the LaTeX manual on each of the computer desks in the Math Lab (Please leave them on the desk when you're finished!)

You may answer the questions by typesetting the answers. If you create a list of items to answer this homework, then you've done problem 1 (you may leave it blank).

1. How do I create a list of items, like:

1. Some text Here
2. Some text Here
  - (a) Description
  - (b) Description

2. What's the difference between “enumerate” and “itemize”?

3. How would I typeset the following? (In your answer, you do not need to write (a), (b), etc).

(a)  $\int_a^b f(x) dx = F(b) - F(a)$  (Notice the big integral sign)

(b)  $\lim_{n \rightarrow \infty} \sum_{i=1}^n f(x_i^*) \Delta x_i = \int_a^b f(x) dx$  (Notice where  $n \rightarrow \infty$  appears)

(c)  $\lim_{\theta \rightarrow 0} \left( \frac{\sin(\theta)}{\theta} \right)^{2\theta}$   
(Notice the size of the parentheses and that sin is NOT italicized)

(d)  $\underbrace{a + b + \cdots + z}_{26}$

(e) I ♥ Math!

(f) What's a “phantom”?

4. How do we get *numbered* equations? (Hint: What are a couple of different ways of getting an equation on its own line?)