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

Look in the LaTeX manual on your desk to find the answers to the following questions. We will answer question (1) together.

You may answer the questions by typing the LaTeX code itself.

- 1. How do I create a list of items, like:
  - 1. Some text Here
  - 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) 
$$\lim_{n\to\infty} \sum_{i=1}^n f(x_i^*) \Delta x_i = \int_a^b f(x) dx$$
 (Notice where  $n\to\infty$  appears)

(c) 
$$\lim_{\theta \to 0} \left( \frac{\sin(\theta)}{\theta} \right)^{2\theta}$$

(Notice the size of the parentheses and that sin is NOT italicized)

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

- (e) I  $\heartsuit$  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?)
- 5. What does: \quad or \quad do? Answer by giving an example of its useage.