Due: 1st August

1. Create the following LATEX source file including your name as author:

- 2. Run the file through LATEX and produce a pdf file.
- 3. Go to the assignment submission page http://turing.une.edu.au/secure/assmit.cgi?unit=amth250 and submit the .tex file and the .pdf file.

Doing Assignment 1

It is assumed that you have already installed LATEX.

Completing the assignment involves a number of operations:

- 1. Creating the LATEX source file.
- 2. Running the file through LATEX to produce a pdf file.
- 3. Submitting your assignment.

Step-by-Step Instructions

The following instructions, while specific to Windows, should be easily adapted by Mac and Linux using Texworks. For Linux users who are comfortable using the command line and a text editor there are separate instructions below.

- It is a good idea to create a new folder, called say amth250 in, for example, the My Documents folder, and keep all your work for this unit there.
- 2. Start Texworks and select New under the File button.

 Type in the LATEX source file from the assignment. Note that a new line is started with the Enter key, pressing Enter twice will give you a blank line¹.
- 3. Select Save As under the File button and save the file as, say assign1, in the amth250 folder. Texworks should recognize it as a LATEX source file and supply the .tex extension. Once this file is saved the pdf file created from it will be placed in the same folder.
- 4. Make sure the Green button is pointing to pdfLaTeX. Then clicking on the button will process the LaTeX source file file and, if successful, produce the pdf file.
 - (a) If there are no errors then the pdf file will display in a new window. Note that the mouse is like a magnifier in the new window. Pressing the left mouse key will magnify the text under the cursor
 - (b) If there is an error in your LATEX source file two panels will appear at the bottom of the editing window. See **Handling Errors** below.

¹L^ATEX source files are *plain text* files so when working with L^ATEX you should forget whatever you might know about Microsoft Word.

5. Once the pdf file has been successfully produced go the assignment submission page

http://turing.une.edu.au/secure/assmit.cgi?unit=amth250 and submit the files assign1.tex and assign1.pdf. These files should be in the *amth250* folder; if not you will have to go back to step 3 above and try to track down what has gone wrong.

Linux Command Line

This section is intended for internal students and Linux users familiar with working from the command line.

- 1. It is a good idea to create a separate directory, say amth250 for your work in this unit.
- 2. Using your favourite text editor, e.g. emacs, vim or gedit, create the LATEX source file for the assignment, named say assign1.tex.
- 3. Once the file assign1.tex has been created and saved the command: pdflatex assign1.tex
 - will process the file and, if successful, create the file assign1.pdf. LATEX will print some information to the screen and possibly create some other files you don't have to worry about. If the processing fails due to errors in LATEX source, type x to exit pdflatex and go back and correct your .tex file.
- 4. You can now view the pdf file. The evince viewer is recommended if left open it will update automatically when the pdf file is updated.
- 5. Once the pdf has been produced go the assignment submission page http://turing.une.edu.au/secure/assmit.cgi?unit=amth250 and submit the files assign1.tex and assign1.pdf.

Handling I⁴TEX Errors

If your LATEX source file has errors, for example you may have typed \LateX instead of \LaTeX, then processing the source file will fail and no pdf file will be produced.

In this case ,in TeXworks, two panels will appear at the bottom of the editing window. The Console Output panel displays the error message from pdflatex. If you typed \LateX instead of \LaTeX then following message² will appear:

²The same message will appear will appear to Linux users working from the command line. The line number at which the error occurred is often helpful in finding the error.

Clicking on LaTeX errors will open a new panel which lists all the errors. Clicking on the filename will then highlight the line on which the error appears. Typing \mathbf{x} (and Enter key) in the bottom Console bar will return TexWorks to its normal state and you can correct the error and process the corrected source file.