

DOCUMENT 1

MAS115 PRESENTATION LECTURE

1. WHAT IS L^AT_EX?

In the Week 1 computer lab you wrote some L^AT_EX. You used a programme called TeXworks, part of a bundle called MiKTeX, which processed files through PDFLaTeX. Let's look at each of these in turn.

1.1. **L^AT_EX.** L^AT_EX is a *mark-up language*. Commands are used to 'mark-up' text to control how it looks. When the computer processes a L^AT_EX file, it reads the mark-up to create the document as intended. For example, $\$$ -signs mean that text should be displayed as mathematics and $\$$ $\$$ means display-math (maths displayed large, on a new line).

There are lots more commands to learn, including `\emph{emphasised text}` to display *emphasised text* and `\footnote{This is a footnote}` to create a footnote¹.

1.1.1. *Structuring a document.* In Lab 1, you used `\section{...}` commands to create sections. L^AT_EX automatically numbers sections and formats the title in a consistent way (usually large and bold as a heading).

Sections are the main chunks of your document. They can be divided into subsections using `\subsection{...}`. Again, L^AT_EX will format and number these. If you think you want a subheading that means you need a subsection. You can even go as far as subsubsections!

The main text of your document is split up into paragraphs. Each paragraph deals with one idea, and a new paragraph signifies a step forward.

In L^AT_EX, paragraphs are input by leaving a blank line space, as in

```
Paragraph 1 starts here... blah blah blah blah
blah blah blah blah blah blah blah blah
```

```
Paragraph 2 starts here... blah blah blah blah
blah blah blah blah blah blah blah blah
```

¹This is a footnote