

Introduction

How not to sound like an idiot. We begin with the most important thing.

L^AT_EX does not rhyme with “paychecks” (or with “Playtex[®]”).

The final sound of the word L^AT_EX is that of the Greek letter “chi” (χ), which sounds approximately like the English letter “k.”

Types of files. The main types of L^AT_EX files are the following.

.tex files are the source files that contain the raw code.

.dvi [DeVice Independent] files are the typeset (output) files.

The key file to save (to your Paris account or somewhere safe) is the .tex file. There are other files (.aux, .log, .sty, and so on) but we will not discuss them here. Most software packages also allow you to export your .dvi file as a .pdf (Portable Document Format) file, which is useful for posting online or sending to persons who do not have L^AT_EX software on their computers.

Software. You type the .tex file on the editor page and the software then creates the typeset .dvi file. Some programs, such as PCTeX[®], combine these two aspects into one piece of software; much of the free software available (see the Math Department’s FAQ webpage) requires you to have separate editor and typesetter programs.

Using this manual. Each section of this manual consists of a .tex file on the left and a .dvi file on the right. The .tex file shows you the code used to create the top half (the Lesson) of the .dvi file. The bottom half of the .dvi file is the Exercise, which you should try to create on your own before looking at the answer .tex file in the back. Some explanatory notes in the Exercises will appear [in brackets in this distinctive font]; you do not need to typeset these notes.

Notation. Some of the mathematical notation used in this manual was chosen to illustrate particular L^AT_EX-related concepts. It may or may not be the same as the notation in your textbook and is therefore not meant to be definitive.

Goals of this manual. This manual is intended to provide lessons and exercises on some of the essential topics a math student needs in order to typeset documents. The hope is that students will see these lessons early in their Bates careers (in Math s21) and will then be able to return to them for review when using L^AT_EX in later courses or when writing their theses. A set of sample thesis files is also included.

What this manual is not. This manual is not meant to be a comprehensive demonstration of how to do everything possible in L^AT_EX. For that, you should consult the full-length books available in the Math Department computer lab or one of the many online resources, some of which can be accessed through the Math Department’s FAQ webpage.

Please send any suggestions or reports of errors to Eric Towne at etowne@bates.edu.

Enjoy!