Case Study – Print-Ready Mathematics Books

Client: Massachusetts Institute of Technology
Process: Receive handwritten notes, hand-drawn sketches – convert into a print-ready book

1. Professors from the Mathematics Department handwrite notes, sketch images
   a. Papers are scanned and emailed to us
2. Notes are typeset in Latex, a specialized software catering to mathematic constructs
   a. Handwriting is interpreted – English syntax and grammar
   b. Mathematic variables, symbols, equations are encoded/typeset
   c. Hand-sketches are illustrated in Gnuplot, , tikz, overpic, epsfig, epic, eepic, pspic, mycurves
   d. Pre-drawn figures are manipulated in Photoshop , Illustrator, CorelDRAW!
   e. Page and element layout – text, images, table elements are aligned with respect to each other, page boundaries
   f. Styles for Headings, Sub-headings, Headers & Footers, ToC, Index…
3. Proofreading – English; comparing what author sent with what we are delivering
4. Preflighting
   a. A print-ready book is submitted to the printing press (usually in Latex)
   b. A print-ready paper is submitted to mathematical journals (usually AMSTex)
5. Slides and transparencies
   a. Beamer, Prosper (for slides in a PDF file)
   b. PowerPoint presentations (using IguanaTex)
6. General documents – formatted according to specifications
   a. Lecture notes, Evaluations (tests)
   b. Web-ready – small size for quick download, compatible with screen readers, view (but prevent printing), print at low resolution, prevent copying text…