Massachusetts Institute of Technology
Mathematics for Computer Science
Prof. Charles E. Leiserson

Handout 1
July 28, 2003

Minicourse Information

MIT Subject

This minicourse is based on the MIT subject 6.042J/18.062J *Mathematics for Computer Science*, which covers discrete mathematics and probability. The material in the MIT subject 6.042 is a prerequisite for SMA5503. In Spring 2003, videos and course materials for 6.042 were compiled as SMA5508 and are available from the SMA website.

Staff

MIT Instructor	Charles E. LEISERSON	`cel@mit.edu`
Course Secretary	Leigh DEACON	`deacon@mit.edu`

Schedule

Lectures will be held in room 34-101, not the regular classroom.

Proofs, Induction	Monday, July 28	1:00 – 2:30
Probability	Tuesday, July 29	1:00 – 2:30
Probability, Independence	Thursday, July 31	1:00 – 2:30
Expectation	Friday, August 1	1:00 – 2:30

How to Learn More

Two textbooks are used for the full-length version of this course at MIT. The book *The Nuts and Bolts of Proofs* by Antonella Cupillari is a small paperback with content similar to our first lecture. The book *Discrete Mathematics and Its Applications* by Kenneth Rosen is an 800-page text. Sections 3.1 and 3.2 of Rosen's book cover our first lecture, and sections 4.4 and 4.5 (very briefly) cover the second and third. You must know all the material in 6.042 as a prerequisite for SMA5503, even though we will be reviewing only part of the material.