Today: Introduction; preliminaries; recursion theorem (informal). §§ 0.*, 6.1.
Next class: Finite-state automata (FSAs). §§ 1.0–1.1.
Reminder: Read the syllabus. Read the book. Use the newsgroup. Do not fall behind.

1. List the members of your group below. Underline your name.

2. 1000 keys to success:

   (a) Remove _____ ; this work on undivided attention and sharp focus.

   (b) Read assigned material _____ and after class.

   (c) Read in _____ -mode, not in fiction-mode or speed-mode.

   (d) Mathematical reading is a _____ activity.

   (e) Use the _____ for questions and discussions outside class.

   (f) Do not be _____ by difficulties.

   (g) You should be very _____ if everything seems easy.

   (h) Go back and forth between intuitive and _____ statements.

3. With all variables ranging over the set $\mathbb{Z}$, for each of the following logical sentences, (1) provide a brief but precise English equivalent, (2) provide a prenex normal form equivalent, and (3) either prove or disprove it.

   (a) $\forall y \exists x [\nexists w [w = x^2] \wedge \exists z [x < y < z]]$

   (b) $\exists x \forall y [\nexists w [w = x^2] \wedge \exists z [x < y < z]]$

4. Use the scheme described on p. 247 of the textbook to generate a concrete implementation of the *self* program.

   Ask questions and use group discussions to clarify ideas.

   Explain how your program works by detailing the correspondence between its elements and those in the description.