

## Preparing a lesson

- A. Introduction: should you give an introduction? what about? Examples?
- B. What is the criteria for choosing problems to solve in class.
- C. Should you solve the problems you'll work in class in advance?
- D. What should be the level of difficulty of the problems solved in class?
- E. How long the preparation of a class should take?
- F. Should you prepare problems for the students to solve in class? If so, what type of problem?
- G. Textbook:
  - 1. How should you use the textbook?
  - 2. Should you choose problems from the textbook, or make up your own for homework and /or quizzes?
  - 3. How should you advise the students as to how they should use the textbook?
  - 4. Suppose you do not agree with the treatment of a certain topic in the book, how would you proceed when explaining this topic?
- H. What would you choose, complete proofs or intuitive arguments?
- I. Why do examples? (there are many in the book!)
- J. Leave time for students questions. How much time? How can you motivate questions?
- K. How would you check whether the students understood your explanation? (ask "did you understand" vs asking questions to them).
- L. Assuming the statements below, how should you prepare your lecture?

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1. Student retention of material covered in the first 10 minutes of a lecture is about 70%; in the final 10 minutes of the lecture, retention has dropped to around 20%.
2. In a 50-minute lecture, students are attentive to the lecturer around 40% of the time.
3. If an instructor speaks at a rate of 150 words per minute, the students will hear around 50 of those words. (Jones- Wilson, 42–43)

## NOTES

- Keep in mind note taking. (and prepare accordingly)
- Break it up
- Summarize often. Summarize at the end of class. Note: You need to relate examples to the introduction you made.