1 Reading

In *A T_EXas Style Introduction to Proofs*, read the rest of Section 4.1. Read Chapter 7 of The Parrot's Theorem.
(The Parrot's Theorem is a novel by Denis Guedj. To briefly summarize the story up to this point: Mr. Ruche runs a bookstore in Paris; Perrette is his employee and she and her children children, Jonathan, Lea, and Max, live in the apartment above the bookshop. Mr. Ruche has received a mysterious letter and some books from an old friend, Grosrouvre, a mathematician who has been living in the Amazon. Simultaneously, Max found a parrot which was fleeing some people in the market.)

2 Response

Answers to these should be written down and turned in in class.

1. The definitions of a subset and a proper subset are very important. What is an example and a non-example of each? Is there an example of a subset which is not a proper subset? How about a proper subset which is not a subset?

2. There's a *lot* of definitions in this chapter. Which of them do you think you're most likely to be confused by or forget the details of later?

3. Give an example of a union, of an intersection, of a complement, and a set difference. Give an example and a non-example of disjoint sets.

3 Exercises

You should bring solutions to these to class and be prepared to present them.

1. Exercise 4.12

2. Exercise 4.15

3. Exercise 4.30

4 Homework Problems

Due Thursday, February 27th

1. Prove, or disprove and salvage, Statement 4.36

2. Exercise 4.37

3. Prove, or disprove and salvage, Statement 4.38

4. Prove, or disprove and salvage, Statement 4.39