1. Go over homework questions.

2. Comment on departmental syllabus (for MWF class schedule).

3. Homework: pages 39–41, numbers 1, 2, 4, 5, 6, 7, 12, 21, 23, 24, 26, 28
   Quiz: Thursday (09/06)

4. Comment on “if $p$ then $q$” in a computer program (this line of code is made correct before going on to the next line).

5. if $p$ then $q$  
   Definitions: An argument is a sequence of statements. All statements but the final one are premises (or assumptions or hypotheses). The final statement is called the conclusion.
   Therefore $q$

6. Definition: An argument form is valid means that no matter what particular statements are substituted for the statement variables in its premises, if the resulting premises are all true, then the conclusion is true.

   Note: An argument is valid if its form is valid.

7. Examples: pages 39–40 # 9, 10, 22, 3

8. Contradiction Rule: If you can show that the supposition that $p$ is false leads logically to a contradiction, then you can conclude that $p$ is true.

9. Examples: (1) $\sqrt{2}$ is irrational
   (2) there exist irrational numbers $\alpha$ and $\beta$ such that $\alpha^\beta$ is rational

10. Give quiz.