## Reading Assignment # 9

Math 9 - Prof. Orellana

## Oct. 17, 2007

Read Section 12.4 and 12.5 and then answer the following questions. It is very important that you read the whole section, even the parts that you think you already understand.

- 1. Why is the title of Section 12.4 "The comparison Tests"? What is the objective of Section 12.4?
- 2. State the Comparison Test.
- 3. Read the proof, now close the book and write the proof as you understood it.
- 4. According to your book, most of the time you use the comparison test you will use two known series, which series?
- 5. What does Note 1 says in Section 12.4?
- 6. What does Note 2 says in Section 12.4?
- 7. State the Limit Comparison Test? How is it proved?
- 8. How do we find estimates when we use the comparison test?
- 9. What is the objective of Section 12.5? What type of series do we consider in this section?
- 10. State the Alternating Series Test.
- 11. Explain Figure 1.
- 12. What are the main steps in the proof of the Alternating Series Test?
- 13. State the Alternating Series Estimation Theorem and explain how Figure 1 helps explain this theorem.
- 14. What does the only Note in Section 12.5 warns you about?