

Reading Assignment # 10

Math 9 - Prof. Orellana

Oct. 19, 2007

Read Section 12.6 and 12.7 and then answer the following questions.

1. What pairs of series are considered in Section 12.6?
2. Give a definition of absolute convergence and the definition of conditionally convergent.
3. In what case is absolutely convergent the same as convergent?
4. State the theorem that relates absolute convergence with convergence. Read the proof and then write a summary in your own words.
5. State the Ratio Test. Read its proof and describe the idea of the proof. How do we define the geometric series used in the proof?
6. There are two notes in this section, what do they say?
7. We skipped the root test; however, since you are a curious student you want to know what it says. So read the Root test and tell me what it says.
8. The last subsection of Section 12.6 deals with rearrangements, what does this mean? What Theorem was proved by Riemann? Do you find this weird?
9. State the names of the tests for convergence of series that we have discussed so far in this chapter?
10. What should your strategy be when you are trying to determine the convergence of a series?