Homework 2 (20 points each)

1. Prove the Leibniz criterion of convergence for alternating series

2. Improve the convergence of Riemann's zeta function $\zeta(3)$.

3. Explain Weierstrass M (Majorant) Test

4. In the example 1.1 × .2 show that seriod can converge uniformely but not absolutely

6. Explain the Abel's test

6.Excersize 1.2.1

7.Excersize 1.2.3

8. Derive Taylor expansion