



Handout 10

MATH 172 Lab: Sections 7 and 8

Lab Instructor (TA): Mohammed Kaabar

Student's Name:-----

Student's ID:-----

Note: This handout covers only Alternating Series Test and Taylor Polynomials.

Instruction: Work in groups to solve the following mathematical problems. DON'T AFRAID TO MAKE MISTAKES BECAUSE WE LEARN FROM OUR MISTAKES!

Problem 1: Determine whether the following series diverges, converges conditionally, or converges absolutely:

$$\sum_{\Gamma=1}^{\infty} (-1)^{\Gamma} \frac{\Gamma + 1}{\sqrt{\Gamma^3 + 3}}$$

Problem 2: Find the 4th degree Taylor Polynomial for $w(\zeta) = \ln(\zeta)$ centered at $\zeta = 1$.