

King Fahd University of Petroleum & Minerals

Department of Mathematical Sciences

MATH - 102-02

Semester 121

Quiz - 1

Name: _____ ID# _____

Problem 1.

Evaluate

$$\lim_{n \rightarrow \infty} \frac{1}{n} \left[\left(\frac{1}{n} \right)^9 + \left(\frac{2}{n} \right)^9 + \cdots + \left(\frac{n}{n} \right)^9 \right]$$

Problem2.

Evaluate

$$\int \tan x \ln(\cos x) dx$$