KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 102 - QUIZ 1

Name:
Student ID #:

Question 1. Write the limit below as an integral

$$\lim_{n\to\infty}\sum_{i=1}^{n}\frac{9(n+2i)}{n^2},$$

whose upper bound is 1.

Question 2. Find the approximation of the integral below by a left Riemann sum with n=4.

$$\int_0^{\pi} e^x \sin(x)\mathrm{d}x$$

Question 3. Find the derivative of the function

$$y=\int_{e^{2x}}^{2^x}\cos(\ln(t))\mathrm{d}t$$

Your Solution.