

**KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
MATH 201 - MAKE UP**

Name:

Student ID #:

Question 1. Consider the region R bounded by $x = 0$, $x = 1$, and the circle $x^2 + y^2 = 4$.

(1) Describe the region R in polar coordinates,

(2) Calculate the area of R using double integral and polar coordinates.

Question 2. Evaluate the triple integral $\iiint_D y dV$ where D is the region bounded by the planes $x = 0$, $y = 0$, $z = 0$, and $2x + 2y + z = 4$.

Your Solution.