

**King Fahd University of Petroleum and Minerals**  
**Department of Mathematics and Statistics**  
**Math 201 - Quiz 6**

Name:

Student ID #:

**Question 1.** Express the integral  $\int_0^2 \int_{x^2}^{2x} f(x, y) dy dx$  as an equivalent integral with the order of integration reversed.

**QUESTION 2 IS ON THE BACK OF THE PAGE.**

**Question 2.** Evaluate  $\iint_R x(1+y^2)^{-1/2} dA$  where  $R$  is the region in the first quadrant enclosed by  $y = x^2$ ,  $y = 4$ , and  $x = 0$ .