King Fahd Univ. of Petroleum and Minerals  
Faculty of Sciences  
Department of Mathematics and Statistics

QUIZ No. 3  
(MATH. 201-081 Sections 22)

Name:  
ID:

**Prob. 1** Compute the double integral

\[
\int_0^1 \int_0^1 \frac{xy}{\sqrt{x^2 + y^2 + 1}} dydx
\]

**Prob. 2** Find the area, in the first quadrant, between \( y = x^2 \) and \( y = \sqrt{x} \).