

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS & STATISTICS
MATH 201-08
Quiz # 5
Dec 17, 2011

NAME:

ID#:

SHOW ALL YOUR WORK

1. **(5points)** Calculate $\int \int_R xy e^{x^2 y} dA$, where $R = [0, 1] \times [0, 2]$.

2. **(5points)** Use a double integral to calculate the volume of the solid bounded by the cylinder $x^2 + z^2 = 9$ and the planes $y = 3x, y = 0, z = 0$ in the first octant.