

KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICS & STATISTICS
MATH 201-05
Quiz # 5
May 26, 2010

NAME:	ID#:
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SHOW ALL YOUR WORK

1. **(3 pts)** Calculate the double integral $\int \int_R \frac{1+x^2}{1+y^2} dA$, $R = [0, 2] \times [0, 1]$.

2. **(3 pts)** Sketch the solid whose volume is given by the iterated integral $\int_0^1 \int_0^1 (4 - x - 2y) dx dy$.

3. **(4 pts)** Evaluate the double integral $\int_0^8 \int_{\sqrt[3]{y}}^2 e^{x^4} dx dy$.