

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 121) Math 201 Quiz # 6

Name: _____ I.D. # _____ Sr. # _____

1. Evaluate $\int_0^4 \int_0^1 \int_{2y}^2 \frac{\cos(x^2)}{\sqrt{z}} dx dy dz$.

2. Using triple integrals in spherical coordinates, derive the formula ($v = \pi a^2 h / 3$) for the volume of a right circular cone whose base radius is a and height h .