

King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
MATH 201-05 Quiz # 5:

Name:.....**ID#:**.....

1) Plot the point whose cylindrical coordinates are given. Then find the rectangular coordinates of the point: $(1, \frac{3\pi}{2}, 2)$

2) Identify the surface whose equation in cylindrical coordinates is $z = 1 - r^2$.

3) Sketch the solid whose volume is given by the integral and evaluate the integral

$$\int_0^{\frac{\pi}{2}} \int_0^2 \int_0^{9-r^2} r dz dr d\theta$$