

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 201 – Term 182 – Quiz 6

Name:

Student ID #:

Section #: 4

Question 1. Write $\int_{-2}^0 \int_{-\sqrt{4-x^2}}^0 \int_{\sqrt{x^2+y^2}}^2 \sqrt{x^2+y^2} dz dy dx$ in terms of cylindrical coordinates.

SEE BACK OF THE PAGE FOR QUESTION 2

Question 2. Use spherical coordinates to find the volume of the solid that lies above the cone $z = \sqrt{x^2 + y^2}$ and below the sphere $x^2 + y^2 + z^2 = 2z$.