ING FAHD UNIVERSITY OF PETROLEUM AND MINERALS DEPARTMENT OF MATHEMATICS & STATISTICS MATH 201-04

Quiz # 3 April 12, 2010

NAME:	ID#:

SHOW ALL YOUR WORK

1. Identify (2pts) and sketch (2pts) the surface $z = \sqrt{1 + x^2 + y^2}$.

- 2. (a) Change (2pts) $(\sqrt{3}, \frac{\pi}{3}, -1)$ From cylindrical to spherical coordinates.
 - (b) Change the equation x = 3 into Cylindrical coordinates(2pts).

3. (2pts) Identify and sketch the surface $r^2 = r$.