

Math 3298 Worksheet 3

Group members (2 to 4): _____

- (1) Convert the implicit quadric equation $z^2 - 2xy = 0$ into spherical coordinates. If you can, determine what kind of quadric surface this is.

- (2) Convert the equation for the sphere $(x - 1)^2 + y^2 + z^2 = 1$ into spherical coordinates, and write ρ as a function of ϕ and θ .