

## HOMEWORK 8

MATH 243

12.5.82

Hints for (b): What happens if you set  $z = 0$ ? What does that mean?

Hints for (c): As a warmup, first figure out what's going on in the  $yz$ -plane. What family of lines do you get? You'll probably find it helpful to make use of the identity  $\cos^2 \theta + \sin^2 \theta = 1$ .

12.6.50

Make sure to describe the coordinate system you choose to use for this problem. There are a couple reasonable choices of coordinate system, so your answer is ambiguous unless you make it clear how you set your coordinates.