

**Math 225: Calculus III**

**Quiz 7** *October 30, 2003*

Name: \_\_\_\_\_

Section: \_\_\_\_\_

1. Find the area of the part of the paraboloid  $z = 3x^2 + 3y^2$  that is below  $z = 4 - x^2 - y^2$ .

2. Find the moment about the  $y$ -axis of the lamina bounded by  $y = 1$ ,  $y = \sqrt{x}$  and  $x = 0$  with density function  $\rho(x, y) = 10e^{y^5}$ .