

## QUIZ 11

Name \_\_\_\_\_

1. Evaluate  $\int_0^1 \int_0^{y^2} \frac{3}{4+y^3} dy dx$ .

2. Find the mass and the center of mass of the lamina bounded by  $x = y^2$  and  $x = 1$  with a density function of  $\delta(x, y) = y^2 + x + 1$ .

3. Evaluate  $\int_{-2}^2 \int_0^{\sqrt{4-x^2}} \sin(x^2 + y^2) dy dx$ . (think polar)