Section _____ **Name** _____

TA _____ **Student Number** _____

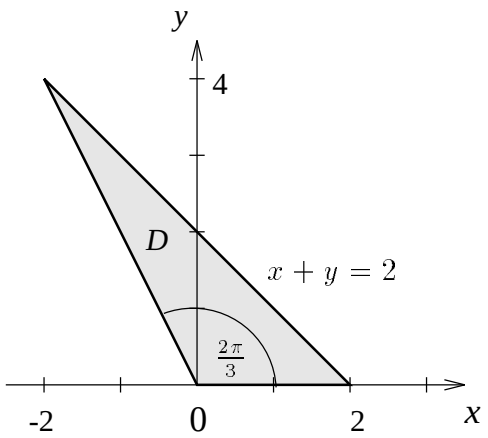
Math 126A **Calculus With Analytic Geometry III** **Fall 1995**

QUIZ #10

12/7/95

Don't worry about algebraically simplifying numbers (i.e. you may leave radicals in the denominator, fractions unreduced, etc.). **Show your work.**

D is the triangle shown below, bounded by the x-axis, the ray making an angle $\theta = \frac{2\pi}{3}$ with the x-axis, and the line $x + y = 2$:



Set up in polar coordinates the integral $\iint_D xy^2\, dA$.

$$\int_{\boxed{}}^{\boxed{}} \int_{\boxed{}}^{\boxed{}} \boxed{}\, d\boxed{}\, d\boxed{}$$