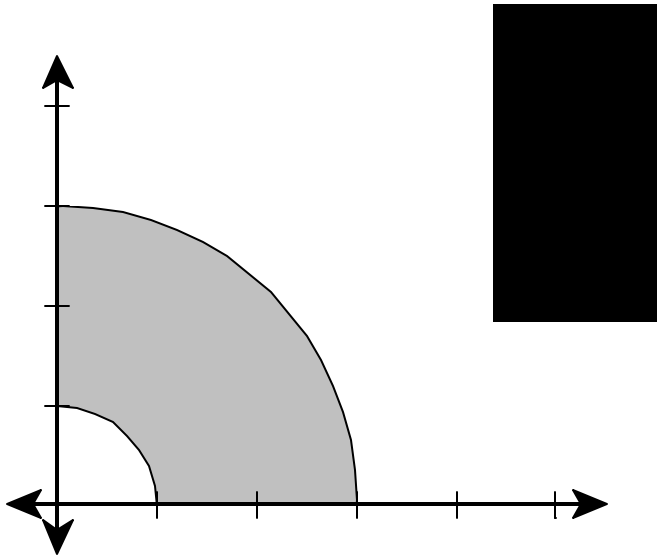
Quiz 5 Calculus 3 10/20/2004

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Write $\int_R f\,dA$ as an iterated integral for the region R shown below:



2. Carefully sketch the region of integration represented by the integral $\int_{\pi/4}^{5\pi/4} \int_0^2 4r^3\,dr\,d\theta$.