QUIZ 6 – Math 213 – Fall 2007
Pietro Poggi-Corradini

1. Reverse the order in $\int_0^2 \int_{x^2}^{2x} (4x+2)dydx$

2. Evaluate $\int_0^{\pi} \int_0^{x} x \sin y dydx$

3. Evaluate using polar coordinates $\int_{-1}^{1} \int_{-\sqrt{1-y^2}}^{\sqrt{1-y^2}} \ln(x^2+y^2+1)dxdy$

4. Describe the domain in Cartesian coordinates for $\int_0^{\pi/4} \int_0^{(\cos\theta)^{-1}} rdrd\theta$

5. Find the centroid of the semidisk $\{x^2+y^2 \leq 1;\ x>0\}$.