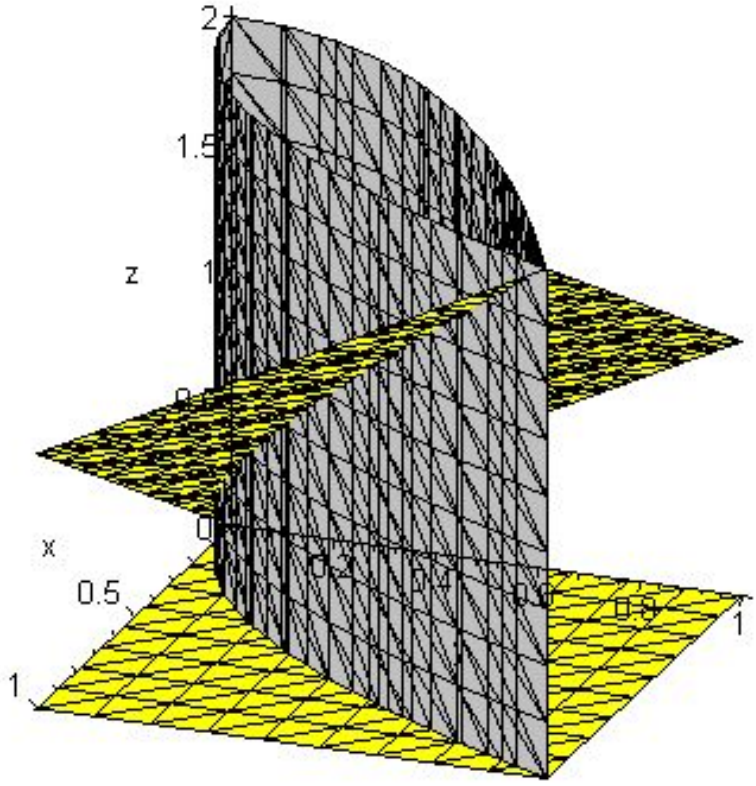
MATH 261 Quiz 10 Name: .
Student number:

Show all work. 5 points each.

1. Change to polar coordinates and set up the integral $\iint_D x^3 + xy^2 dA$ where D is the region that lies to the left of the y-axis and between the circles $x^2 + y^2 = 1$ and $x^2 + y^2 = 4$. .

2. Find the limits of integration for evaluating $\iiint_E xy\, dV$ where E is the solid bounded by the parobolic cylinders $Y = x^2$ and $x = y^2$ and the planes $z = 0$ and $z = x + y$ (see back of page for figure).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