MATH 261 Quiz 11 Name: .
Class time:

Show all work. 5 points each.

1) Use cylindrical coordinates to set up the integral (including limits of integration) $\iiint_E e^z$ where E is enclosed by $z = 1 + x^2 + y^2$, $x^2 + y^2 = 5$ and $z = 0$.

2) Use the transformation $x = 2u + v$,$y = u + 2v$ to evaluate the integral $\iint_R (x - 3y)\, dA$ where R is a triangle with vertices (0,0), (2,1) and (1,2)