## Calculus and Analytic Geometry III

Name:

The majority of the credit you receive will be based on the completeness and the clarity of your responses. Show all of your work and justify your solutions as much as possible.

This is a 15 minute guiz and has 2 questions, for a total of 10 points

(5 points) 1. Calculate the iterated integral

$$\int_{-3}^{3} \int_{0}^{\pi/2} (y + y^{2} \cos(x)) dx dy.$$

(5 points) 2. Calculate the double integral over the region  $R = [0,2] \times [0,3]$ 

$$\iint_R y e^{-xy} \, dA.$$