

Math 201-142 Quiz 4

Name _____ Section ___ Id _____
Serial# _____

Q1) For the integral $\int_0^1 \int_y^1 x^2 e^{xy} dx dy$

- Sketch the region of integration
- Reverse the order of integration
- Evaluate the integral.

Q2) a) Change the Cartesian integral

$$\int_{-1}^0 \int_{-\sqrt{1-x^2}}^1 \left(\frac{2}{1+\sqrt{x^2+y^2}} \right) dy dx$$

into an equivalent polar integral (first draw the region of integration by drawing the boundaries).

- Evaluate the polar integral.