

“QUIZ” for Oct. 26, 2009

NAME: (print!) _____ **Section:** _____

E-MAIL ADDRESS: (print!) _____

1. Use polar coordinates to compute the double integral

$$\int \int_D xy \, dA \quad ,$$

where

$$D = \{(x, y) \mid x^2 + y^2 \leq 1, x \geq 0, y \geq 0\} \quad .$$

2. Evaluate the iterated integral by converting it to polar coordinates

$$\int_0^1 \int_0^{\sqrt{1-y^2}} e^{x^2+y^2} \, dy \, dx \quad .$$