

Your Name:_____ Signature:_____

TA Name:_____ Drill Time:_____

Quiz 7

Math 2574: Calculus III

Instructions: CLEARLY SHOW ALL YOUR WORK.

1. **[5 points]** Let $f(x, y) = e^{x+2y}$ and let R be the region $R = \{(x, y) \mid 0 \leq x \leq \ln 2, 0 \leq y \leq \ln 3\}$. Evaluate the integral

$$\iint_R f(x, y) \, dA.$$

2. [5 points] Consider the iterated integral

$$\int_0^1 \int_y^1 e^{x^2} dx dy.$$

Sketch the region R in the xy -plane over which this integral is being performed, then change the order of integration. *Do not evaluate the integral!*

