

Math 225: Calculus III
Quiz 10 Dec. 3/8, 1992

Name: _____
Section: _____

1. Let C be the boundary of the rectangle $0 \leq x \leq 2$, $0 \leq y \leq 1$, oriented counterclockwise. Use Green's Theorem to calculate the line integral $\int_C e^x dx + xe^{-y} dy$.

2. Find the surface area of the parabolic sheet $z = 4 - y^2$ between the planes $y = x$ and $x = 0$ in the first octant.