

Name:

November 3, 2016

MAC 2313.9728

Cyr

Quiz 10

You must show all work to receive full credit!!

Problem 1. (5 points) Use polar coordinates to evaluate $\iint_D \frac{y^2}{x^2 + y^2} dA$, where $D = \{(x, y) \mid 1 \leq x^2 + y^2 \leq 9\}$.

Problem 2. (5 points) Evaluate $\iiint_E (x - y) dV$, where E is enclosed by the surfaces $z = y^2 - 1$, $z = 1 - y^2$, $x = 0$, and $x = 1$.