

MATH 201 QUIZ 4

SECTION:

ID:

NAME:

1. Find the absolute minimum and absolute maximum of the function $f(x, y) = xy$ on $R = \{(x, y) : x^2 + y^4 \leq 12\}$.

2. Let $D = \{(x, y) : 0 \leq x \leq 1, 0 \leq y \leq 2\sqrt{3}\}$. Compute

$$\iint_D \frac{1+x^2}{4+y^2} dA.$$

3. Compute the following iterated integral.

$$\int_0^1 \left(\int_{\sin^{-1} x}^{\pi/2} e^{\cos y} dy \right) dx.$$