MA 234-01

§15.1 − 15.2

Quiz #4

score

Name: _____

2 May 1997

1. A function $f(x, y)$ has the values given in the table below. Doing the best you can with the information given there, approximate the value of the $\int_R f(x, y)\, dA$ where $R = \{(x, y)|0 \leq x \leq 2,\, 0 \leq y \leq 2\}$.   *(10 points)*

$x \backslash y$	0	1	2
0	4	3	1
1	6	4	1
2	9	6	2

2. Setup an integral which would compute the volume of the solid inside the cylinder in 3-space given by $x^2 + z^2 = 4$ which satisfies $x \geq 0$, $y \geq 0$, $z \geq 0$, and $x + y \leq 4$. You do not need to actually compute the value.   *(10 points)*