

Math 253, Section 102, Fall 2006

Quiz 2, September 27

Name:

SID:

Instructions

- The total time is 20 minutes.
- The total score is 25 points.
- Use the reverse side of each page if you need extra space.
- Show all your work. A correct answer without intermediate steps will receive no credit.
- Calculators and cheat sheets are not allowed.

Problem	Points	Score
1	6	
2	9	
3	10	
TOTAL	25	

2

1. Find and sketch the domain of the function

$$f(x, y) = \sqrt{x} + \sqrt{y}.$$

(6 points)

2. (a) Rewrite the equation $\rho = 2 \cos \phi$ in Cartesian coordinates.
(6 points)

(b) Describe the surface represented by the equation in part (a).
(3 points)

4

3. Find the traces of the surface $4y = x^2 + z^2$ in the planes $x = k$ and $y = k$. Then identify the surface and sketch it.

(5 + 5 = 10 points)