

ING FAHD UNIVERSITY OF PETROLEUM AND MINERALS  
DEPARTMENT OF MATHEMATICAL SCIENCES  
MATH 201-06  
Quiz # 3  
April 07, 2008

NAME:	ID#:
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**SHOW ALL YOUR WORK**

- (a) (**3points**) Find symmetric equations for the line of intersection of the two planes  $\Pi_1 : x - 2y + z = 8$  and  $\Pi_2 : 2x + y + z = 8$

(b) (**2points**) Find the angle between the two planes  $\Pi_1$  and  $\Pi_2$  of Part a.

(c) (**2points**) Identify and sketch the surface  $x - y^2 - z^2 = 1$ .
  
2. (**3points**) Identify the surface whose equation is given by  $z = r^2$ .