

ING FAHD UNIVERSITY OF PETROLEUM AND MINERALS
DEPARTMENT OF MATHEMATICAL SCIENCES
MATH 201-11
Quiz # 3
November 19, 2007

NAME:

ID#:

SHOW ALL YOUR WORK

- (a) **(3points)** Find the parametric equations of the straight line L through the point $P(1, -2, 2)$ that is perpendicular to the plane $\Pi : x - 2y + z = 8$.

(b) **(2points)** Where does the line L intersect the plane Π ?

(c) **(2points)** Find the distance between the point P and the plane Π in two different ways.

- (3points)** Describe and sketch the surface $z = \cos x$.