MthU242 Sci. & Engin. Calculus II
Quiz #11 Professor Gilmore
20 Minutes April 5, 2007

Name:_____.

Show All Your Work

1 A force moves a particle from the point P = (2, -1, -2) to the point Q = (1, -1, 2) in 3-space.

a. Write down the displacement vector.

b. Find the length of this vector.

2. a. Write the equation for the plane which is parallel to the z axis and contains the points P = (1,0,0) and Q = (0,1,0).

3. A boat is traveling at a speed of 10 miles per hour in a direction that is due west. A man dives off the boat with a horizontal speed of 5 miles an hour, diving to the north side of the boat. The water is still. Calculate the velocity of the man relative to the water, and the direction of his dive.

Name:_____.