

The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**  
This is a 15 minute quiz and has 2 questions, for a total of 10 points

(5 points) 1. Find an equation of a plane through the point  $(1, -1, -1)$  and parallel to the plane  $5x - y - z = 6$ .

(5 points) 2. Find the vector function that represents the curve of intersection of the cone  $z = \sqrt{x^2 + y^2}$  and the plane  $z = 1 + y$ .