Math 2263, Quiz 1 You must show all work for full credit, you have 15 min to finish it.

1.(5 pt) Find the angle between **a** and **b** where **a** = (1, 2, 2), **b** = (1, 1, 0).

2.(5 pt) Find a non-zero vector orthogonal to the plane through the points P(1,0,-1), Q(1,1,-2), R(1,-1,0), and find the are of triangle PQR.

3.(5 pt) Find an equation of the plane through the points (0, 0, 0), (1, 3, 0), (2, 6, 1).