Name: September 1, 2016 MAC 2313.9728 Cyr

> Quiz 1 You must show all work to receive full credit!!

Problem 1. (2 points) A sled is pulled along a level path through snow by a rope. A 30 N force acting at an angle 60° above the horizontal moves the sled 80 meters. Find the work done by the force.

Problem 2. (2 points) Find parametric equations for the line passing through the point (2, 2, 4) and parallel to the vector $\langle 3, 2, -1 \rangle$.

Problem 3. (6 points) Find the equation of the plane passing through the point (1, 5, 1) and perpendicular to the planes 2x + y - 2z = 2 and x + 3z = 4.