Last Name: _____

First Name: _____

Student ID: _____

Quiz 7 (A)

Question 1. *(3 marks)* Given the point $Q(3, -1, 5)$ find an initial point P so that the vector $\vec{PQ}$ is in the opposite direction as $\vec{v} = (1, -1, -2)$.

Question 2. *(3 marks)* Given $\vec{u} = (1, 3, -1)$, $\vec{v} = (0, 2, 2)$, and $\vec{w} = (-3, 1, 2)$ evaluate $\|3\vec{u} - 2\vec{v} + \vec{w}\|$.

Question 3. *(4 marks)* Find the angle between the vectors $\vec{u} = (2, -2, -4)$, and $\vec{v} = (2, 1, -1)$.