Name: _____

Student ID: _____

Quiz 8

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. §3.1

    a. #3d *(1 mark)* Sketch the following vectors $\vec{v}_4 = (3,4,5)$ with the initial points located at the origin.

    b. #10b *(2 marks)* Find the terminal point of the vector that is equivalent to $\vec{u} = (1,1,3)$ and whose inital point is $A(0,2,0)$.

    c. #22b *(2 marks)* For what value(s) of t, if any, is the given vector $(8t,2t)$ is parallel to $\vec{u} = (4,-1)$?

Question 2. §3.2

    a. *(2 marks)* #20d Find a unit vector that is oppositely directed to the given vector $(-3,1,\sqrt{6},3)$.

    b. *(3 marks)* #23d Find the cosine of the angle θ between $\vec{u} = (-2,2,3)$ and $\vec{v} = (1,7,-4)$.