

Last Name: \_\_\_\_\_

First Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

## Quiz 9 (B)

**Question 1.** (5 marks) Find the equation of the plane that passes through the points  $P_1(2, 0, -1)$ ,  $P_2(2, 3, 5)$ , and  $P_3(4, 4, 2)$ .

**Question 2.** (2 marks) Find the equations of the line that passes through the point  $P(4, -2, 0)$  and is parallel to the vector  $\vec{v} = (\frac{25}{2}, -10, 5)$ .

**Question 3.** (3 marks) Are the plane found in question 1 and the line found in question 2 perpendicular, parallel or neither?