Name:

SID:

Serrial Number:

Calculus III, Math 201
Fall 2012, Term 121
                                    Quiz 3 Section 09

Instructions: Show Your Work!

(4$^{\text{pts}}$)   **1.** Show that the following vectors are not coplanner
$\vec{u} = \langle -1, 2, 4 \rangle, \vec{v} = \langle 0, 1, 3 \rangle, \vec{w} = \langle 4, -2, 1 \rangle$.

(4$^{\text{pts}}$)   **2.** Find parametric equations for the line through the point $(-2, 0, 1)$ that is parallel to the plane
$2x + y = 5$ and perpendicular to the line $x = 1 + t, y = 2 - t, z = -5 + 2t$.

(4$^{\text{pts}}$)   **3.** Describe the surface $x = 5y^2 + 2z^2$ and then sketch it.