

**Math 2400 Calculus 3, Fall 2014**

Homework Set 5

**Due: 9/30/14**

1. Find a parametric representation for the plane that contains the lines  $\vec{r} = \langle 1-t, 2+2t, 5+4t \rangle$  and  $\vec{r} = \langle 2t, 4-t, 9+2t \rangle$ .
2. Find a parametric representation for the part of the sphere  $x^2 + y^2 + z^2 = 36$  that lies between the planes  $x = -3$  and  $x = 3$ .
3. Section 11.1: #6, 22, 44