Homework - MS403

Due Thursday, November 21, 2013

Remember to write on only one side of the sheet.

From the book:
Section 6.3: 3.1,3.2,3.3

1. Determine the glide line and glide vector for the glide reflection $t_v \rho_\theta r$. What conditions on v and θ are needed to make the glide reflection just a reflection?

2. Prove that if L_1 and L_2 are lines through the origin in $\mathbf{R}^2$ then the composition of the reflections across the two lines is a rotation and determine the angle of rotation.

3. Show the composition of reflections about parallel lines is a translation by a vector orthogonal to the lines.