Math 4213 - Complex Analysis
Quiz #5 - 2012.01.25
Solutions

---

1. Explain geometrically what the reciprocal transformation $w = \frac{1}{z}$ does to the complex plane.

   The reciprocal transformation is an inversion, with the modulus of $w = \frac{1}{z}$ being the reciprocal of the modulus of z, and the angle is a reflection about the x-axis, since the argument of $w = \frac{1}{z}$ is the negative of the argument of z.