1. Suppose H is a hyperbolic hexagon with equal angles θ. What is it's area as a function of θ? You may assume that the area of an asymptotic triangle is π.

2. Suppose $z, w \in \mathbb{C}$ and that $w \neq z$ and $w \neq z^d$. Show that (w, w^d, z, z^d) is real. Conclude that w^d is on the Möbius line determined by z, w and z^d. Hint: Multiply the top and bottom by $\bar{w}\bar{z}$ and simplify.