- 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 $\overline{w}\overline{z}$ and simplify.