MATH 812T HOMEWORK DAY 7

Due date: Wednesday June 10, 2014

Problem 1: In the upper half plane model of the hyperbolic plane, find the equation of the hyperbolic line through the points $P = (3, 3)$ and $Q = (10, 4)$ and find the hyperbolic distance from P to Q.

Problem 2: Consider the upper half plane model of the hyperbolic plane. Let A, B and C be the points $(2, 1)$, $(4, 1)$ and $(6, 1)$. Find the measure (in degrees) for angle $\angle ABC$.

Problem 3: Consider the upper half plane model of the hyperbolic plane. Give the coordinates of three points A, B and C such that $\angle ABC$ is a 120° angle. Justify your answer.