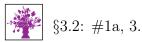# MATH 4250/6250
PROBLEM SET #9

DUE April 23, 2015.

Instructions: Turn in (at least) **three** problems of your choice, but **including any underlined problem(s)**. Graduate students should include at least one "pyramid" problem.

Problems to work but not hand in:
   §3.2: #1b, 8, 11.

§3.2: #1a, 3.

From a recent final exam:

A. In the hyperbolic plane $\mathbb{H}$, consider the Euclidean circle C centered at $(0, 5)$ and passing through $(0, 1)$.

   (i) It is a fact that C is a hyperbolic circle (see #10). Find (with proof) its center and radius.
   (ii) Calculate (with proof) the geodesic curvature κ_g of C.

§3.2: #4, 5, 6, 7, 10.

§3.2: #17, 18.