

## DIFFERENTIAL GEOMETRY HOMEWORK 8

LECTURER: SIU-CHEONG LAU

Compute the Gaussian curvature for the hyperbolic upper half-plane, which is  $\{(x, y) \in \mathbb{R}^2 : y > 0\}$  equipped with the first fundamental form

$$\frac{1}{y^2} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}.$$

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