

Spring 2021, Math 621: Preliminary Problem Set 1
Due: Thursday, January 28th, 2021
Point-Set Topology

Preliminary problems. These should be submitted to Gradescope before Thursday discussion.

(P1) Find an explicit homeomorphism from \mathbb{R}^2 to the open unit disk

$$D = \{(x, y) \in \mathbb{R}^2 : x^2 + y^2 < 1\}.$$

You do **not** need to prove that your map is a homeomorphism.