

Spring 2021, Math 621: Preliminary Problem Set 4
Due: Thursday, February 18th, 2021
Homotopy Equivalence (Week 2)

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

- (P1) Let $X = I \times \{0\}$ and $Y = \{0\} \times I$. Demonstrate that the constant maps $f : X \rightarrow Y$ and $g : Y \rightarrow X$ that send every point to $(0, 0)$ are homotopy equivalences.