INTRO TO ALGEBRAIC TOPOLOGY
HOMEWORK 5 DUE MARCH 5

Turn in the following:
(1) Prove that a space $X$ is simply-connected if and only if there is a
unique homotopy class of paths connecting any two points in $X$.
(2) Hatcher Exercise 1.3.2 (p. 79)
(3) Hatcher Exercise 1.3.4 (p. 79)
(4) Hatcher Exercise 1.3.7 (p. 79)
(5) Hatcher Exercise 1.3.9 (p. 79)