Algebraic Topology HW 2

Due 10/2

All problems are from Hatcher unless otherwise specified.

- Suppose X is path-connected. Prove that for $x_0, x_1 \in X$ the isomorphism $\pi_1(X, x_0) \cong \pi_1(X, x_1)$ is independent of the path from x_0 to x_1 iff $\pi_1(X, x_0)$ is abelian.
- Section 1.1: 6,10,11,12,16