Math 525: Problem Set 3

Due date: In class on Wednesday, September 16. Course Web Page: http://dunfield.info/525 Office hours: Mondays from 11-12, Tuesdays from 11:15 - 12:15, and by appointment. For an appointment, just talk to me after class, or email me at nmd@illinois.edu. Required Text: Allen Hatcher, *Algebraic Topology*, http://www.math.cornell.edu/~hatcher/AT/ATpage.html

- 1. Hatcher, Section 1.3, Problem 4.
- 2. Hatcher, Section 1.1, Problem 7.
- 3. Read Prop. 1.12 in Hatcher and work Section 1.1, Problem 10.
- 4. Hatcher, Section 1.1, Problem 12.
- 5. Hatcher, Chapter 0, Problem 1.
- 6. Hatcher, Chapter 0, Problem 2.