Math 525: Problem Set 4

Due date: In class on Wednesday, September 30. 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. Read the section "Attaching spaces" in Chapter 0 of Hatcher (bottom of page 12 through top of page 14). Then do Chapter 0, Problem 20.
- 2. Hatcher, Section 1.2, Problem 7.
- 3. Hatcher, Section 1.2, Problem 9.
- 4. Hatcher, Section 1.2, Problem 12.
- 5. Hatcher, Section 1.2, Problem 14.