Math 540: Exercises for Week 1

Reading: Hatcher Chapter 0. See also the Appendix for more on CW complexes.

1. Hatcher Exercise 0.1.

2. Hatcher Exercise 0.6. [Note that this uses the results of Hatcher 0.4 and 0.5, which you may also like to try to prove.]

3. Hatcher Exercise 0.11.

4. Hatcher Exercise 0.16.

5. Hatcher Exercise 0.20. [Justifying this requires Hatcher's Proposition 0.17, which we'll discuss next week, but it's good to start visualizing what's going on now.]