

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.
3. Hatcher Exercise 0.11.
4. Hatcher Exercise 0.16.
5. Hatcher Exercise 0.20.
6. Prove that any CW complex is locally path-connected.
7. Show that a CW complex is path connected if and only if its one-skeleton is path-connected.