**Algebraic topology I, Fall 2014**

**Homework 1, due Monday, September 15**

1. Explain how to equip (a) $\mathbb{R}^2$ and (b) $\mathbb{R}^2 \setminus \{(0,0)\}$ (punctured plane) with a CW-complex structure.

Exercises 5, 6a, 8, 9, 17, 20, 23 from Hatcher, Chapter 0, pages 18-20.