Announcements

- I have posted the homework averages in eCampus.

- Our final class meeting is tomorrow (May 1).

- I will hold my usual office hour 3:00–4:00 in the afternoon on Tuesday (May 1) and Thursday (May 3).

About the final exam

- The comprehensive final examination takes place 10:30–12:30 on Friday (May 4).

- Material for the final exam: Chapters 1–5, Sections 6.1–6.2, and Chapter 7.

- The six exam questions are mostly definitions, examples, and theorems.

An exercise on quotient spaces

Let X be $\mathbb{R}$ with the standard Euclidean topology.

Form a quotient space Y by identifying all the integers.

The space Y can be viewed as $(\mathbb{R} \setminus \mathbb{Z}) \cup \{\mathfrak{z}\}$, where $\mathfrak{z}$ represents the equivalence class of the integers.

Is this quotient space Y

1. connected?
2. compact?
3. Hausdorff?
4. separable?
5. path-connected?
6. second countable?