

## Reminder

- ▶ The second exam takes place next class (April 11).
- ▶ The material for the exam is mainly Chapter 5 and Sections 6.1 and 6.2.
- ▶ Please bring your own paper to work on.

# Vocabulary review

Define the following terms.

1. continuous mapping
2. path-connected space
3. component of a topological space
4. metric (distance function)
5. topology induced by a metric
6. equivalent metrics
7. metrizable space
8. isometry
9. first-countable space
10. convergence in a metric space

# Theorem review

1. How many ways do you know to say that  $f: X \rightarrow Y$  is continuous?
2. What theorems do you know that contain both the words “continuous” and “connected”?
3. What theorems do you know about the concepts of connectedness and path-connectedness?
4. What theorems do you know about metric spaces?

Assignment due next class

Study for the upcoming exam.