

Topology II, Newberger, Fall 2005

Exam 1 Review

This exam covers Sections 22, 25, 51, 52.

- I. Know the following definitions and theorems:
 - a. quotient map, quotient topology, quotient space
 - b. topological group
 - c. saturated set
 - d. components, path components
 - e. locally connected, locally path connected
 - f. homotopic, path homotopic
 - g. fundamental group
 - h. simply connected
 - i. homomorphism induced by h
 - j. evenly covered, covering map
- II. You will be asked to prove at least one of the following theorems. Theorems 22.2, 25.1, 25.5, 51.1, 52.3.
- III. You will be asked to solve at least two problems involving the vocabulary and theorems in the sections listed above.