

MTH 516/616: Topology II

Practice Assignment II

Singular homology

1. Try the following problems from Section 2.1 (Pages 132-133) of Hatcher: 11, 14, 16, 17, 20, 21, 27, 28, and 29.
2. Try the following problems from Section 2.2 (Pages 155-159) of Hatcher: 1, 2, 5-7, 8, 10, 11, 14, 19, 20-23, 28, 30, 32, 34, and 36.
3. Reading assignment.
 - (a) Proof of Theorem 2.20 (Excision Theorem) from Pages 119-124 of Hatcher.
 - (b) Proof of Lemma 2.34 (the infinite case) from Pages 138-139 of Hatcher.
 - (c) Proof of The Cellular Boundary Formula from Pages 140-141 of Hatcher.