

Math 869: Assignment 4

Due Friday April 24

Problem 1. Solve Exercise 10 on page 156 of Hatcher's book.

Problem 2. Solve Exercise 22 on page 157 of Hatcher's book.

Problem 3. Consider S^1 with its usual cell structure consisting of 0-cell and an 1-cell. Let X be the 2-complex obtained from S^1 by attaching two 2-cells by maps of degrees 2 and 3, respectively. Compute the homology and the co-homology groups of X .

Problem 4. Solve Exercise 23 on page 157 of Hatcher's book.

Problem 5. Solve problem 1 on page 228 of Hatcher's book.

Problem 6. Solve problem 7 on page 229 of Hatcher's book.

NOTE: You might find helpful reading Example 3.13 of the book before working on the last two problems.