

MAT 542: Algebraic Topology, Fall 2016
Suggested Problems for Week 12

You may hand in solutions to at *most* 2 problems every 2 weeks and no later than 2 weeks after the necessary material for them is covered in class.

From Munkres: 54.5, 54.5, 58.1, 59.2, 59.4, 55.5, 55.6, 60.1

Problem S

Compute $H_*(\mathbb{R}P^n; \mathbb{Z})$. Use this and the Universal Coefficient Theorem for H_* to obtain $H_*(\mathbb{R}P^n; \mathbb{Z}_2)$ and $H_*(\mathbb{R}P^n; S^1)$. Compare with the conclusions of Problems B(c) and C.

Problem T

Describe minimal generating sets for the homologies of the space in 59.5