

Algebraic topology

Homework 7. Due Wednesday, Nov 8.

Read and think through the entire Section 2.1 of Hatcher.

1. Check the exactness of the long sequence of homology groups

$$\longrightarrow H_n(A) \longrightarrow H_n(B) \longrightarrow H_n(C) \longrightarrow H_{n-1}(A) \longrightarrow$$

associated with a short exact sequence of complexes

$$0 \longrightarrow A \longrightarrow B \longrightarrow C \longrightarrow 0.$$

Exercises 5, 11, 17a, 18, 22 at the end of section 2.1.