INTRO TO ALGEBRAIC TOPOLOGY
HOMEWORK 10 DUE APRIL 23

Turn in the following:

(1) Hatcher Exercise 2.2.2 (p. 154)
(2) Hatcher Exercise 2.2.9 parts (a) and (b) (p. 156)
(3) Hatcher Exercise 2.2.28 (p. 157)
(4) Hatcher Exercise 2.2.31 (p. 158)
(5) Hatcher Exercise 2.2.32 (p. 158)

Think about the following (but do NOT turn in):

- If $0 \to A \to B \to C \to 0$ is a short exact sequence of finitely-generated abelian groups, show that rank $B =$ rank $A +$ rank C.