INTRO TO ALGEBRAIC TOPOLOGY
HOMEWORK 9 DUE APRIL 16

Turn in the following:
  (1) Let X be the Möbius band, and A the boundary of X.
     (a) Construct a Δ-complex structure on X.
     (b) Compute $H_n^\Delta(X)$ and $H_n^\Delta(A)$. (You should use the Δ-complex
         structure that A inherits from X.)
     (c) Let $i\colon A \to X$ denote inclusion. Compute $i_*\colon H_n^\Delta(A) \to H_n^\Delta(X)$
         for all n.
     (d) Use your answer to part (c) and the long exact sequence of the
         pair (A, X) to compute $H_n(X, A)$.
  (2) Hatcher Exercise 2.2.1 (p. 154)
  (3) Hatcher Exercise 2.2.2 (p. 154)
  (4) Hatcher Exercise 2.2.4 (p. 154)
  (5) Hatcher Exercise 2.2.6 (p. 154)