

INTRO TO ALGEBRAIC TOPOLOGY
HOMEWORK 2 DUE FEBRUARY 5

Turn in the following:

- (1) Let X be a contractible space. Prove that the suspension of X is also contractible.
- (2) Show that punctured \mathbb{RP}^n is homotopy equivalent to \mathbb{RP}^{n-1} .
- (3) Hatcher Exercise 0.19 (p. 19)
- (4) Hatcher Exercise 0.20 (p. 19)
- (5) Hatcher Exercise 0.23 (p. 20)

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

- Hatcher Exercise 0.18 (p. 19)