Math 8062 Homework 1
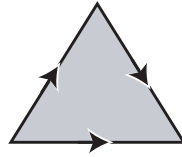
1. Consider a cell complex X, with one 0–cell, one 1–cell, and one triangular 2–cell. The three sides of the triangle are identified to the same edge, with the following orientations:

Prove that X is contractible.

2. Do problems 1, 3, 5 on page 38 of Hatcher.