Homework #1
Due Friday, January 18

1. Something to figure out by Monday, January 14: Why does $\partial_{j-1}\partial_j(x) = 0$ for all $x$, in the algebraic proof of Euler’s relation?

2. Problems to write up and turn in:
   - Exercise 2.6 #1,2,5,6,7.
   - Exercise 2.7.
   - Exercise 2.9.
   - Exercise 2.10.

3. Problems that worthwhile pondering, but I am not asking you to turn in (at least, not with the current assignment):
   - Exercise 2.2.
   - Calculate $f_2 - f_1 + f_0$ for the polyhedral torus. Why can you conclude that the torus is not shellable?
   - Describe $H_j$ for the polyhedral torus, $j = -1, 0, 1, 2$. 