

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, $j = -1, 0, 1, 2$.