

Written Assignment 13 (due 4/22/13 by end of class)

Exercises # 4, 7, 8, 9 from Professor Lee's notes on simply connected spaces. In problem 7 you should assume that the spaces  $X_1, \dots, X_n$  are path connected. In problem 8, if you get stuck, try the problem first for  $n = 2, 3$  for a bit of a hint.

While it will not be collected, I highly recommend taking a look at Exercise 10. This problem gives an excellent overview of many of the (geometric) topological spaces we have considered, and requires you to think about all of the topological invariants we have at our disposal. It makes an excellent review/challenge.