# Math 4096 Homework 6

Due Thursday, October 20

**1.** Exercise 4.18. Show that the surface produced by Seifert's algorithm does not depend on the orientation we choose for a knot.

**2.** Let $L$ be a link of 2 components. What happens to the surface produced by Seifert's algorithm if we change the orientation on one component of $L$?

**3.** Exercise 4.20. Find surfaces for the first two diagrams (skip the third).

**4.** Exercise 4.22.

**5.** Exercise 4.27.