Math 4096 Homework 3

Due Thusday, September 20

1. Find the unknotting number of the 9_2 knot in the knot tables (page 283).

2. Prove that unknotting number satisfies $u(K_1 \# K_2) \le u(K_1) + u(K_2)$.

3. Exercise 3.15 on page 69.

4. Exercise 2.10 on page 44 (read carefully: the second tangle has a line break after the first '3').

5. Exercise 2.11. Please do this both by drawing pictures and by checking continued fractions.