Math 732: Knot Theory
Asst. 3, due F., 2/4

Problems to submit

You must submit 4 of the following; clearly indicate which ones you want me to grade. You are welcome to submit any others that you want me to provide feedback on.

1. Determine the number of isotopy classes of composite knots with 9 crossings. (Nonsymmetric versions of the same base knot type must be included.) After class on 1/26, we posited that there were 18 such knots.

2. (required) Using your two knots, what are the different two-factor composite knots that can be produced? What is the symmetry type of each one?

3. Show that the Whitehead link 5_1^2 has pure exchange symmetry, using isotopy diagrams.

4. Cromwell 1.12

5. Complete 1-2 problems from assignment 2 that you did not submit last week.