Teknillinen korkeakoulu
Johdatus solmuteoriaan, kevät 2002
Exercise 4. (15.2.)

1. Determine the linking numbers of the following links:

2. How does the linking number change, when an oriented link is reflected? What is the linking number of an amphicheiral link?

3. If an oriented PL-link consists of more that two knots, then its linking number is defined to be the sum of the linking numbers of all pairs. Also this is an invariant of the equivalence class of the link.

   Show that the link (without orientation) below is not amphicheiral.
   Hint: Give suitable orientations to the different components and calculate the linking numbers for the link and its mirror image. Use the result of the previous problem.

4. Below is explained, how each prime knot can be given a numerical symbol. Read the text and explain, how the trefoil gets the symbol 4 6 2.

Huom: Viikolla 8 eli 22.2. ei hiihtoloman vuoksi ole luentoa eikä harjoituksia.