Homework 4

Knot Theory - Atkinson

Due on Friday, Febrary 16.

Remember to follow the guidelines given in the first assignment.

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

(2) Exercise 2.13 on page 46.

(3) Exercise 2.14 on page 46.

(4) Exercise 2.31 on page 55. Make a complete list of all possible situations.

(5) Convert the knot diagram K shown below to a Tait graph $G(K)$. Using the moves you found in the previous exercise, find a sequence of graph moves transforming $G(K)$ to a single vertex. This exhibits a sequence of Reidemeister moves from K to the standard diagram of the unknot.