Math 496, Fall 2012: Homework 3
Due Friday October November 16

Problem 1: (a) Calculate the Kauffman bracket of the knot $6_2$. See the table on page 280 for a projection of the knot.
(b) Use your answer from (a) to calculate the Jones polynomial of the knot $6_2$.

Problem 2: (a) Solve exercise 6.8 on page 155 of the book.
(b) Solve exercise 6.12 on page 162 of the book.


Problem 4: Solve exercise 6.15 on page 166 of the book.

Problem 5: Solve exercise 6.16 on page 167 of the book.

Problem 6: Use Problem 4 to show that the 2-component link shown in Figure 6.28 (page 169 of the book) is not splittable.

Problem 7: Solve exercise 6.20 on page 171 of the book.