MATH 101B: HOMEWORK

10. Homework 10

This is the last assignment. There is no final exam or any other work to do for this course! The following problems are due Thursday (5/3/7). The strict deadline is 1:30pm Friday.

(1) If V, S are irreducible representations of G and S is one-dimensional, then show that $V \otimes S$ is also irreducible.
(2) Show that the irreducible representations of a product $G \times H$ are the tensor products of irreducible representations of G, H.
(3) Compute the character table of the alternating group A_4 and the induction-restriction table for the pair (S_4, A_4).

Date: April 26, 2007.