

## HOMEWORK #8, DUE 12-2

### MATH 504A

1. Compute the character table of the alternating group  $A_4$ ; this will be the first character table you have computed that involves nonreal numbers.

2. Compute the character table of  $S_4$ , using that the tensor product of irreducible representations is irreducible whenever one or both of them have dimension one.

3-5: Dummit and Foote, 17.3.3-5, p. 822.