

Physics 129b
Problem Set Number 9
Due Wednesday, March 12, 2008

Reading: Read the note on the permutation groups and Young diagrams posted on the web, which complements your reading in the text last week.

37. Exercise 1 of the note on the permutation groups and Young diagrams, linked to the course web page.
38. Exercise 2 of the note on the permutation groups and Young diagrams, linked to the course web page.
39. Exercise 3 of the note on the permutation groups and Young diagrams, linked to the course web page.
40. Exercise 4 of the note on the permutation groups and Young diagrams.
41. For the group S_4 list all of the standard Young tableaux and deduce the dimensions of the irreducible representations.