## Physics 752, Elementary Particles II, Spring 2007, O.W. Greenberg

Homework: Assignment 1, due 2/2/07

- 1. Write down the states of the nucleon octet using the bose operators.
- 2. Complete the analysis of the  $J^P, I, Y$  states in the 56, 70, and 20 constructed from 3 quarks each in the 6 of SU(6).
- 3. Work out the list of states labeled by  $J^P, I, Y$  in the P-wave first excited baryons.