

Physics 487 Homework 1: Due Feb. 3, 2015

1. ) Delineate the 6 permutation matrices for the numbers (1,2,3). Show explicitly that  $P^n = I$ , where  $P$  is a permutation matrix,  $I$  is the identity matrix and  $n = 2$  or  $3$ . What does this identity mean?
- 2.) Griffiths: 5.1, 5.4, 5.6, 5.11, 5.13, 5.20 and 5.21