Community College of Philadelphia **Spring 2012**
Math 152-Probability **Dr. Yun Yoo**

Attendance Quiz 10

Name: _____Date: _____

1. Wing has different books to arrange on a shelf: 4 blue, 3 green, and 2 red.

(a) In how many ways can the books be arranged on a shelf?

(b) If book of the same color are to be grouped together, how many arrangements are possible?

(c) In how many distinguishable ways can the books be arranged if books of the same color identical but need not be grouped together?