

### **Section 5.4 Extra Examples**

An urn contains 6 blue balls and 5 orange balls. In how many ways can we select 4 blue balls and 4 orange balls from the urn?

In how many ways can 7 hearts be chosen if 12 cards are chosen from a well shuffled deck of 52 playing cards?

A business organization needs to make up an 8 member fundraising committee. The organization has 6 accounting majors and 9 finance majors. In how many ways can the fundraising committee be formed if at least 4 account majors are on the committee?

Math 1313 Section 5.4 Extra

A firm has 27 senior and 28 junior partners. A committee of three partners is selected at random to represent the firm at a conference. In how many ways can at least one of the junior partners be chosen to be on the committee?

A classroom of children has 19 boys and 20 girls in which five students are chosen to do presentations. In how many ways can the five students be chosen so that more girls than boys are selected?

An electronics store receives a shipment of 37 graphing calculators, including 5 that are defective. Eight calculators are chosen at random to be sent to a local high school. How many ways can at least 4 defective calculator be chosen to be sent to the high school? **Should one use the complement to solve this problem?**