Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 2.1 follow-up**

1. Offspring, Pink Floyd, Sublime, the Rolling Stones and the Beatles are in a tour and agree to determine the order of performance based on random selection. Each band’s name is written on a card, and placed in a hat. All five cards are drawn out of the hat, one at a time. The order in which the cards are drawn determines the order the bands will perform. What is the probability of the Rolling Stones performing fourth and the Beatles last?
2. Florida’s LOTTO is set up as follows: Each player chooses six numbers from 1 to 53. Any player that matches all six numbers to the winning numbers, in any order, wins the prize. What is the probability of winning? What is the probability that you will win if you buy 5000 different tickets?
3. A club consists of five men and seven women. Three members are selected at random to attend a conference. Find the probability that the selected group consists of three men. Also, find the probability that the selected group will consist of one man and two women.
4. Three men and three women line up at a checkout counter in a store. a.) In how many ways can they line up? b.) In how many ways can they line up if the first person is a woman, then the line alternates by gender? c.) Find the probability that the first person in line is a woman and the line alternates by gender.

 5.) A city council consists of six Democrats and four Republicans. If a committee of three people is selected, find the probability of selecting one Democrat and two Republicans?

1. You are dealt 3 cards from a deck of 52 cards. Find the probability that all 3 are face cards (Jack, King, Queen).