Name: _____ Date: _____

Period: _____ Pre-Calculus ***16.1- 16.2 Review***

Complete the following problems, showing all work.

1. In a study of 82 young (under the age of 32) drivers, 39 were men who were ticketed, 11 were men who were not ticketed, 8 were women who were ticketed, and 24 were women who were not ticketed.
   a. If one of these subjects is randomly selected, find the probability of getting a man or someone who was ticketed.

   b. If one of these subjects is randomly selected, find the probability of getting a woman or someone who was not ticketed.

2. In the 105th Congress, the Senate consists of 9 women and 91 men. If a lobbyist for the tobacco industry randomly selects three different Senators, what is the probability that they are all men?

3. For a certain raffle, 845 tickets are sold.
   a. In how many ways can four $50 gift certificates be awarded?

   b. In how many ways can a $100, a $50, a $20, and a $10 gift certificate be awarded?

4. Find the probability of obtaining a number greater than 4 on a single toss of a die.

5. Find the probability of drawing an ace or a spade from a shuffled standard deck of cards.

6. What is the probability of being dealt two hearts in succession, without replacement?

7. Three cards are dealt from a well-shuffled standard deck without replacement.
   a. What is the probability that all three cards are clubs?

   b. What is the probability that all three cards are red?

   c. What is the probability that all three cards are aces?

   d. What is the probability that none of the cards is an ace?

   e. What is the probability that at least one of the cards is an ace?

   f. What is the probability that either one or two of the cards is an ace?