Name: _____

Probability: Sections 2-1 through 2-3 Review

1) Two cards are selected from a standard deck of 52 cards, one after the other without replacement. What is the probability that the two cards are both face cards?

2) Suppose 90% of all Americans have attended a religious ceremony at least one time in the past year. What is the probability that 4 randomly selected Americans will all have attended at least one religious ceremony in the past year?

3) A single 6-sided die is rolled once and a single card is drawn from a standard deck of 52 cards. What is the probability that the die shows a result greater than 3 and the card is a heart?

4) A young girl has a box of 8 color crayons but has decided they need only 3 colors to make a picture for her Grandfather. In how many ways can the child select the three crayons?

5) In how many ways can a committee of 4 people be selected if there must be at least 1 man and 1 women on the committee and there are 6 men and 7 women from which to pick?

6) How many unique three-letter 'words' can be formed by selecting three letters from the alphabet if no letter may be repeated?

7) How many unique three-letter 'words' can be formed by selecting three letters from the alphabet if letters may be repeated?

8) 20% of all households in the Twin Cities get the Star Tribune newspaper delivered to their home while only 15% get the Pioneer Press delivered to their home. If 70% of homes do not get either newspaper delivered, what percent of homes get both newspapers delivered?

9) A special deck of cards contains only the face cards and aces from a standard deck of cards.
a) If one card is dealt, what is the probability that the card is an ace?
b) If one card is dealt, what is the probability that the card is a black ace?
c) If two cards are dealt, what is the probability that both cards are face cards?

10) The standard California license plates made in 2011 or later must begin with a digit anywhere from 6 or 9 followed by a letter anywhere from T to Z. They then have any two letters followed by any three digits. How many of these license plates are possible?