STA107 Final exam review

1. What is the number of ways of choosing 4 cards from a pack of 52 playing cards? In how many of these

   a) Four cards are of the same suit
   b) Four cards belong to four different suits
   c) Two are red cards and two are black cards
   d) Cards are of the same color?

2) Find the number of words with or without meaning which can be made using all the letters of the word AGAIN?

3) It is required to seat 5 men and 4 women in a row so that the women occupy the even places. In how many ways are these arrangements possible.

4) Two dice are thrown and the sum of the numbers which come up on the dice is notes. Consider the following events:

   a) the sum is even
   b) the sum is a multiple of 3
   c) the sum is less than 4
   d) the sum is greater than 11

which pairs of these events are mutually exclusive?

5) There are 4 cities (A,B,C,D) that a person is planning on visiting . What is the probability that he visits: