## Math 13 Chapter 4 Overview Problems

1) Suppose that you chose a card randomly from a well-shuffled deck of 52 cards. Find the probability that it is a queen or a red card.
2) Suppose that you chose two cards randomly from a well-shuffled deck of 52 cards. Find the probability of getting a queen and then red card.
3) Suppose that you were dealt 5 cards randomly from a well-shuffled deck of 52 cards. How many different 5 card hands are possible?
4) A couple wants to have 5 kids.
a) Find the probability that they have exactly 5 girls.
b) Find the probability that they have at least one boy.
5) Out of 1250 people interviewed, 698 had flown on a plane in the last year. What percent does this represent?
6) It was reported that $42.3 \%$ of Americans approve of the job that President Obama is doing. There are $317,336,410$ people in the US. How many of them approve of the job that President Obama is doing?
7) Suppose you take a True/False test with 10 questions, but you randomly guess each answer. Find the probability of getting an A on the test.
8) Suppose there were 12 kids in a race. How many possible $1^{\text {st }}, 2^{\text {nd }}, 3^{\text {rd }}$ places are possible.
