Please complete the following problems for homework.   Check Mrs. Kent's website for due dates.
Homework is an independent assignment and must be completed without assistance from other students. Students may not use unauthorized assisted devices on this assignment, including but not limited to Excel or other computer software/programs/devices. A handheld calculator to assist with arithmetic may be used. All problems must show all work on this paper (or an attached paper) to receive any credit since partial credit is only available on tests or quizzes.

1. A bag contains 12 apples and 8 oranges. A fruit is selected at random from the bag. Find the probability of selecting:
   a. An apple

   b. An orange

   c. An apricot

2. A fair die has 8 faces, numbered 1 through 8. When it is tossed, find the probability of getting:
   a. An odd number

   b. A number greater than 5

   c. A prime number

   d. A number which is a factor of 48

3. A card is drawn from a standard deck of playing cards. Find the probability of drawing:
   a. A red 7

   b. A face card

    c. A blue diamond

    d. An odd numbered card

4. A letter is chosen as random from the word "DISCOVERY". Find the probability that the letter chosen is:

    a. A "V"

    b. Found in the word "LEGENDARY"

    c. Not found in the word "ORDINARY"

5. John rolls a die thirty times. Out of those thirty rolls, he rolls a 5 twelve times.

    a. What is the theoretical probability of rolling a 5?

    b. What is the experimental probability of rolling a 5 in this experiment?

    c. Do you think this die is a fair die? Why or why not?