AP Statistics Assessment

1. Make a histogram and describe the distribution with the given data.

   20, 5, 7, 26, 32, 40, 45, 4, 14, 30, 38, 43, 23, 20, 1, 19.

2. Draw a boxplot and determine if there are any outliers: 11, 12, 3, 4, 8, 16, 24, 8, 9, 5, 6.

3. Find the mean and standard deviation: 25, 5, 25, 10, 2.

4. Graph the data, find, and draw the LSRL.

x	1	2	3	4	5	6
y	2	4	7	8	9	12

5. A bag contains 3 red marbles, a black marble and 6 blue marbles. What is the probability that a marble selected is

a) a red   b) a red or black   c) not a red

6. Three dice are rolled. Find each of the probabilities.

a) P(three 1s)   b) P(two 3s)   c) P(no 4s)

7. A basket has three green marbles and seven red marbles. You pick out two marbles.
a) Draw a tree diagram of these events.

b) What is the probability of picking 2 red marbles?

c) What is the probability of picking 1 red and 1 green marble?

d) What is the probability of picking at least one green marble?

8. The average IQ is 100 with a standard deviation of 10.

a) Draw a normal distribution curve with the information.

b) Find the probability of an IQ above 120.

c) Find the probability of an IQ below 95.

d) Find the probability of an IQ between 90 and 105.