Worksheet 4

1. Suppose that in San Diego, 60 percent of the voters favored more dog parks. Find the probability that among 6 voters questioned, 5 of them favored more dog parks.

2. If the random variable x represents the number of girls in a family of 4 children, find the mean and standard deviation for x.

3. A company manufactures calculators in batches of 50 and there is a 2% rate of defects. Find the mean and standard deviation for the number of defects per batch.

4. A professor finds that when she schedules an office hour, an average of 2.3 students arrive. Find the probability that in a randomly selected office hour, the number of student arrivals is:

   a. 0
   b. 1
   c. 2
   d. 3
   e. 6

5. Determine whether the following is a probability distribution. If it is, find its mean and standard deviation:

x	P(x)
0	.512
1	.301
2	.132
3	.055