1. In January 2007 a Fox News Poll of 900 registered voters found that 72% of the respondents believed that global warming is occurring.
   (a) Tell the margin of error for 95% confidence.
   (b) Tell the 95% confidence interval.

2. A hospital administrator finds that the mean hospital stay for a sample of 81 women after childbirth is 2.3 days. She claims that the mean stay at her hospital is greater than the national average of 2.1 days. Assuming that the average at her hospital is the same as the national average, the probability of observing a sample with a mean of 2.3 days or more is 0.17. Is the longer stay at her hospital statistically significant at the 0.05 level?

3. A pollster wants to report the percentage of people who are in favor of stricter regulations of banks. Her supervisor insists that the margin of error for 95% confidence must be 2.5%. How many people should she include in her sample?

4. A car comes in 10 colors. You also have a choice of 3 styles (sedan, station wagon, or hatchback) and 2 interior designs (standard and deluxe). How many different variants of the car are there?

5. If you flip 3 fair coins, what is the probability of getting at least 2 tails?

6. Suppose you pick a card at random from a standard 52-card deck. What is the probability that it is a King or a Queen?