JUDGMENT & DECISION MAKING QUIZ

Before reading chapter 8 of your text you are to indicate your best guesses on the following problems. Once you have completed these problems you are to read the assigned pages in chapter 8 of your text. As you read the chapter you are to try to identify heuristics that people typically use to answer each of the questions and then write that heuristic on your "quiz" (be specific as possible). We will be referring to these problems and heuristics during the next lecture.

1. Suppose that you have a regular penny with one head (H) and one tail (T), and you toss it six times in a traditional coin toss. Which outcome seems most likely?

   (a) HHHHHH
   (b) H H HTTT
   (c) THHTHT

2. If you were to select five (5) people in the US and measure their IQs, which of the following choices would be most likely?

   (a) 100, 100, 100, 100, 100
   (b) 140, 140, 140, 140, 140

3. Given a family of six children, chosen at random from US families, which sequence of birth order is more likely?

   (a) Girl, Boy, Boy, Girl, Boy, Girl
   (b) Boy, Boy, Boy, Girl, Girl, Girl

4. A nearby town is served by two hospitals. About 45 babies are born each day in the larger hospital. About 15 babies are born each day in the smaller hospital. Approximately 50 percent of all babies are boys, as you know. However, the exact percentage of babies who are boys will vary from day to day. Some days it may be higher than 50 percent, some days it may be lower. For a period of one year, both the larger hospital and the smaller hospital recorded the number of days on which more than 60 percent of the babies were boys. Which hospital do you think recorded more such days?

   (a) The larger hospital
   (b) The smaller hospital
   (c) About the same (say, within 5 percent of each other)

5. Imagine that some psychologists have administered personality tests to 30 engineers and 70 lawyers, all people who are successful in their fields. Brief descriptions were-written for each of the 30 engineers and 70 lawyers. A sample description follows. Judge that description by indicating the probability that the person described is an engineer. Use a scale from 0 to 100.

> Jack is a 45-year-old man. He is married and has four children. He is: generally conservative, careful, and ambitious. He shows no interest in political and social issues and spends most of his tree time on his many hobbies which include home carpentry, sailing, and mathematical problems.

The probability that the man is one of the 30 engineers in the sample of 100 is percent.

6. Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in antinuclear demonstrations.

Now rank the following options in terms of their likelihood in describing Linda. Give a ranking of 1 to the most likely option and a ranking of 8 to the least likely option:

_____ Linda is a teacher at an elementary school.
_____ Linda works in a bookstore and takes Yoga classes.
_____ Linda is active in the feminist movement.
_____ Linda is a psychiatric social worker.
_____ Linda is a member of the League of Women Voters.
_____ Linda is a bank teller.
_____ Linda is an insurance salesperson.
_____ Linda is a bank teller and is active in the feminist movement.

7. Some experts studied the frequency of appearance of various letters in the English language. They selected a typical passage in English and recorded the relative frequency with which various letters of the alphabet appeared in the first and the third positions in words. Forexample, in the word language, L appears in the first position and N appears in the third position. In this study, words with less than three letters were not examined. Consider the letter K. Do you think that the letter K is more likely to appear in the first position or the third position? Now estimate the ratio for the number of times it appeared in the first position in comparison to the number of times is appeared in the third position. For example, if you guess 2:1, this means that it appeared in the first position twice as often as in the third position; if you guess 1:2, this means that it appeared in the third position twice as often as in the first position.

Your guess: _____

8. Simply read this list of names:

Louisa May Alcott	Maxine Hong Kingston	Agatha Christie
John Dickson Carr	Virginia Woolf	Richard Watson Gilder
Alice Walker	Robert Lovett	Nancy Atwater
Thomas Hughs	Judy Blume	Brian Hooker
Laura Ingalls Wilder	George Nathan	Harriet Beecher Stowe
Jack Lindsay	Jane Austen	Henry Vaughan
Edward George Lytton	Allan Nevins	Judith Krantz
Margaret Mitchell	Henry Crabb Robinson	Arthur Hutchinson
Michael Drayton	Joseph Lincoln	James Hunt
Edith Wharton	Emily Bronte	

9. Mr. Crane and Mr. Tees were scheduled to leave the airport on different flights, at the same time. They traveled from town in the same limousine, were caught in a traffic jam, and arrived at the airport 30 minutes after the scheduled departure time of their flights. Mr. Crane is told that his flight left on time. Mr. Tees is told that his flight was delayed, and just left five minutes ago. Who is more upset?

10. Within a 5-second time limit, estimate the answer to the following multiplication problem:

8 X 7 X 6 X 5 X 4 X 3 X 2 X 1 =

11. For each of the following questions, answer in terms of a range, rather than a single number. Specifically, you should supply a 98 percent confidence interval, which is the range within which you expect the correct answer to fall. For example, if you answer a question by supplying a 98 percent confidence interval that is 4,000 to 7,000, this means that you think there is only a 2 percent chance that the real answer is either less than 4,000 or more than 7,000. All questions are based on information in The Information Please Almanac.

1. What was the population in Georgia in 1992?

2. How many universities are in Canada?

3. In what year did the philosopher Plato die?

4. What is the size of Brazil, in square miles?

5. What is the average annual snowfall in Toronto?

6. What is the literacy rate in Cuba?

12. Imagine that the United States is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimate of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved.
If Program B is adopted, there is a one-third probability that 600 people will be saved, and two-thirds probability that no people will be saved.

Which program would you favor? _____

Now imagine the same situation, with these two alternatives:
If Program C is adopted, 400 people will die.
If Program D is adopted, there is a one-third probability that nobody will die, and two-thirds probability that 600 people will die.

Which program would you favor? _____

13. Within a 5-second time limit, estimate the answer of the following multiplication problem:

1 X 2 X 3 X 4 X 5 X 6 X 7 X 8 =

14. Imagine that you have decided to see a play and paid the admission price of $10 per ticket. As you enter the theater, you discover that you have lost the ticket. The seat was not marked, and the ticket cannot be recovered.

Would you pay $10 for another ticket for the play? _____

15. Imagine that you have decided to see a play where admission is $10 per ticket. As you enter the theater, you discover that you have lost a $10 bill.
Would you still pay $10 for a ticket for the play? _____

16. Without looking back at the list of names in Problem #8, were there more females in the list or more males in the list? _____