Chapter 1: Stats Starts Here

Chapter 2: Data

Key Vocabulary:

- Statistics
- data, datum
- variation
- individual
- respondent

- subject
- participant
- experimental unit
- observation
- variable



- categorical
- quantitative

Calculator Skills:

enter data in a list

- delete a datum
- name a new list
- clear a list
- change a datum delete a list

- recreate a list
- copy a list

1. Name three things you learned about *Statistics* in Chapter 1.

- •
- •
- •

2. The authors claim that this book is very different from a typical mathematics textbook. Would you agree or disagree, based on what you read in Chapter 1? Explain.

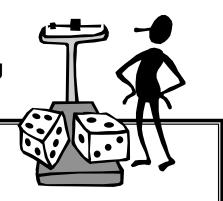
- 3. According to the authors, what are the "three simple steps to doing Statistics right?"
- 4. What do the authors refer to as the "W's of data?"
- 5. Why must data be in context (the W's)?
- 6. Explain the difference between a *categorical variable* and a *quantitative variable*. Give an example of each.

Chapter 3: Displaying and Describing Categorical Data

Key Vocabulary:

- frequency table
- relative frequency table
- distribution
- bar chart
- pie chart

- contingency table
- marginal distribution
- conditional distribution
- independent
- segmented bar chart



Simpson's Paradox

- 1. According to the authors, what are the three rules of data analysis?
- 2. Explain the difference between a frequency table and a relative frequency table.
- 3. When is it appropriate to use a bar chart?
- 4. When is it appropriate to use a pie chart?
- 5. When is it appropriate to use a contingency table?
- 6. What does a marginal distribution show?
- 7. When is it appropriate to look at a conditional distribution?
- 8. What does it mean for two variables to be independent?
- 9. How does a segmented bar chart compare to a pie chart?
- 10. Explain what is meant by Simpson's Paradox.