Section 1: The Need for Psychological Science (pp. 19-24)
Define: hindsight bias – critical thinking
1. Explain what today’s psychological science documents regarding our intuitive mind.
2. Give two phenomena that illustrate why we can’t rely solely on intuition & common sense.
3. Explain how common sense relates to errors in our recollections & explanations.
4. What does it mean to be overconfident?
5. Define the following in terms of their relation to a scientific attitude: (A) curiosity, (B) skepticism, (C) humility
6. Give five questions critical thinkers would ask when considering an issue.

Section 2: How Do Psychologists Ask & Answer Questions? (pp. 24-36)
1. Explain how our everyday use of the term “theory” differs from its meaning in science.
2. What do good theories produce? How do these direct research?
3. What must researchers be aware of when testing theories?
4. How do psychologists report their research? Explain why replication is important.
5. Explain two things a theory must do in order to be useful.
6. Give & explain three methods used to test hypotheses & refine theories.
7. Give the three basic types of descriptive methods.
8. What is the danger of using case studies of atypical individuals?
9. Answers to survey questions often depend on what two factors?
10. What is the best basis for generalizing? How do you obtain a representative sample? Which is more important: the size of a sample, or that it is representative?
11. In what way is naturalistic observation limited?
12. What type of graph illustrates correlations? Give & explain the three types of possible correlations, including the graphs of each.
13. What will the coefficient of a weak correlation look like?
14. What is a common thinking error regarding correlations?
15. Explain what often happens when we believe there is a relationship between two things. What do random sequences contain that contributes to this?
16. Explain how experiments enable researchers to focus on the possible effects of one or more factors.
17. Explain how use of the following in experiments isolates the effects of various factors: (A) random assignment, (B) blind & double-blind procedures, (C) placebo, (D) experimental group, & (E) control group.
18. Give & explain three types of variables encountered during experiments.

Section 3: Statistical Reasoning in Everyday Life (pp. 37-41)
1. Give two steps that follow the gathering of data.
2. Give the three measures of central tendency. Explain what is meant by a distribution being skewed.
3. What is meant by variation? What is the most useful standard for measuring how much scores deviate from one another & why is this?
4. Describe the most common type of distribution seen in large numbers of data.
5. Give three principles to keep in mind when deciding if it is safe to generalize from a sample.
6. When can we say that a difference has statistical significance & what does this mean?
7. What percentage is used in determining statistical significance?
8. True or False: Statistical significance also indicates how important results are.
Define: culture – informed consent – debriefing
1. Explain the purpose of experiments & how this purpose allows us to apply information from experiments to everyday behaviors.
2. How does culture shape our behavior? Give an example of a difference & similarity researchers have found between genders. Explain what this evidence reveals to us about gender & culture.
3. Give two reasons why psychologists study animals. Give the two issues that emerge out of the debate on animal research.
4. What American organization creates ethical codes to guide researchers? Give the four codes used. At universities, research proposals must be screened through what?
5. In what three ways can values affect psychology? What concern do some people have with psychology’s exploration of our inner universe? What is psychology’s true purpose?