Chapter 13
Extra Practice Questions

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem.

1. The plastic arrow on a spinner for a child's game stops rotating to point at a color that will determine what happens next. Determine whether the following probability assignment is legitimate. 1. _____

Probability of ...			
Red	Yellow	Green	Blue
0.6	0.1	0.1	0.1

A. Legitimate B. Not Legitimate

2. An Imaginary Poll in April 2005 asked 939 U.S. adults what their main source of news was: newspapers, television, internet, or radio? Here are the results: 2. _____

Response	Number
Newspapers	249
Television	389
Internet	105
Radio	196
Total	939

If we select a person at random from this sample of 939 adults, what is the probability that the person responded "Newspapers"?

A. 0.209 B. 0.265 C. 0.112 D. 0.414 E. 0.249

3. In a survey of American women who were asked to name their favorite color, 19% said blue, 19% said red, 16% said green, 11% said yellow, 14% said black, and the rest named another color. If you pick a survey participant at random, what is the probability that she named another color? 3. _____

A. 0.14 B. 0.18 C. 0.21 D. 0.79 E. 0.84

Solve the problem. Round your answer, as needed.

4. An Imaginary Poll in January 2005 asked 1162 U.S. adults how likely they were to see a new movie that was coming out in the summer. Here's how they responded: 4. _____

Response	Number
Will definitely see it	219
Will probably see it	284
Will probably not see it	304
Will definitely not see it	355
Total	1162

Let's call someone who responded that they would definitely or probably see it a "likely viewer" and the other two categories, "unlikely viewer." If we select two people at random from this sample, what is the probability that one is a likely viewer and one isn't?

A. 0.187 B. 0.306 C. 0.153 D. 0.245 E. 0.491

5. Opinion–polling organizations contact their respondents by sampling random telephone numbers. Assume that interviewers can now reach about 74% of U.S. households, while the percentage of those contacted who agree to cooperate with the survey is 32%. Each household, of course, is independent of the others. What is the probability of obtaining an interview with the next household on the sample list? 5. _____

A. 0.503 B. 0.237 C. 0.740 D. 0.177 E. 0.083

6. You roll a fair die six times. What is the probability that you roll all 5's? 6. _____

A. 1 B. 0.833 C. 0.167 D. 1.2 E. 0.00002

Determine whether the events are disjoint, independent, neither, or both.

7. In rolling a fair die once, the events of getting a 2 and getting a 1 7. _____

A. Disjoint B. Independent C. Neither D. Both

8. In rolling a fair die twice, the events of getting a 1 on the first roll and a 4 on the second 8. _____

A. Disjoint B. Independent C. Neither D. Both

9. In driving a car, the events of driving over the speed limit and getting a speeding ticket 9. _____

A. Disjoint B. Independent C. Neither D. Both

Provide an appropriate response.

10. According to the National Telecommunication and Information Administration, 56.5% of U.S. households owned a computer in 2001. What is the probability that of three randomly selected U.S. households at least one owned a computer in 2001? 10. _____

A. 18.0% B. 91.8% C. 56.5% D. 82.0% E. 43.5%

Answer Key
Testname: EXTRA PRACTICE QUESTIONS

1. B
2. B
3. C
4. E
5. B
6. E
7. A
8. B
9. C
10. B