5-6A Lesson Master

Questions on SPUR Objectives See pages 320–323 for objectives.

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1. An event has probability *t*. What is the probability of its complement occurring?

In 2 and 3, a card is selected at random from a standard deck.

- **2.** What is P(king or queen)?
- 3. What are the odds that the card is not the ace of spades?
- **4.** The probability of event *A* is 0.3, the probability of event *B* is 40%, and the probability of event *C* is $\frac{1}{3}$. Can any two of these events be complements of one another?
- **5.** At a raffle, 780 tickets were sold. William bought 8 tickets and Leonard bought 25. What is the probability that neither of them won?
- **6.** Two six-sided dice are tossed. What is the probability that their sum is greater than 7, given that the first roll was a 4?
- 7. Event *X* has a probability of 36%. The odds of event *Y* happening are 5 to 11. Which event is more likely?
- 8. Elmer places papers numbered 1 through 20 in a hat, and wishes to pull out four numbers. The first three numbers he pulls are 1, 19, and 12. What are the odds that the fourth number is a two digit number?
- **9.** Morris tossed a fair coin 100 times, and found that it landed on *heads* 95 times.
 - a. What is Morris' relative frequency of getting a head?
 - b. If you choose a random number *n* between 1 and 100, what is the probability that the *n*th toss of that coin is *tails*?
 - **c.** If the coin is tossed again, what is the probability that it will land on *tails*?
- **10.** A class has 15 boys, 12 of whom are over 5' 5" in height. The same class has 16 girls, 10 of whom are over 5' 5" in height. In this class, what is the relative frequency of students who are 5' 5" or under in height?