CHAPTER 12 Extra Practice

Skills

Lesson 12-1 **You roll a number cube. Find each probability.**

1. rolling a 2
2. rolling a 3 or 5
3. rolling a 2, 4, or 6

Lesson 12-2

4. A quality control engineer at a factory inspected 300 glow sticks for quality. The engineer found 15 defective glow sticks. What is the experimental probability that a glow stick is defective?

The number of wins and losses for basketball teams are shown. Find each experimental probability.

5. Kingwood, Humble, Texas
   Wins: 37, Losses: 4
   Find P(Win).
6. Westchester, Los Angeles, Calif
   Wins: 25 Losses: 3
   Find P(Loss).

Lesson 12-3 **Make a table to show the sample space for each situation. Then find the number of outcomes.**

7. You toss three coins.
8. You spin a number 1 to 6 and toss a coin.
9. You choose one letter from each of the two sets of letters E, F, G, H and A, B, C.
10. You toss two coins and spin a spinner with three congruent sections colored red, white, and blue. Draw a tree diagram to find the sample space. Then find P(2 heads, then blue).

Lesson 12-4 **A bag contains 6 green marbles, 8 blue marbles, and 3 red marbles. Find *P(B)* after *A* has happened.**

11. A: Draw a green marble. Keep it.
    B: Draw a red marble.
12. A: Draw a blue marble. Replace it.
    B: Draw a red marble.

Lessons 12-5 and 12-6 **State whether the situation is a *permutation* or a *combination*. Then answer the question.**

13. In how many ways can a committee of 2 be chosen from 5 members?
14. In how many ways can a president and a treasurer be selected from a club of 5 members?