27. **CHALLENGE** You have 5 tickets to a play. You invite 4 friends to see the play. You hand out the tickets at random. One ticket is for an aisle seat, and the other tickets are for the next 4 seats in the row.

   a. What is the probability that you will get the aisle seat?

   b. What is the probability that you will get the aisle seat and your best friend will get the ticket for the seat next to you?

   c. *Explain* how you could solve the problem in part (b) using permutations.

REVIEW
Lesson 13.1;
TAKS Workbook

28. **TAKS PRACTICE** A spinner was spun 32 times. The results are shown in the table below. All sections of the spinner have the same area.

Spinner Results

Yellow	7
Green	11
Red	6
Blue	8

Which color on the spinner has the same experimental probability as theoretical probability? *TAKS Obj. 9*

  (A) Yellow   (B) Green   (C) Red   (D) Blue

QUIZ *for Lessons 13.1–13.4*

1. **MARBLES** A bag contains 16 red marbles and 8 white marbles. You select a marble at random. *(p. 843)*

   a. What is the probability that you select a red marble?

   b. What are the odds in favor of selecting a red marble?

2. **PASSWORD** The password for an e-mail account is the word FISH followed by a 3-digit number. The 3-digit number contains the digits 1, 2, and 3. How many different passwords are possible? *(p. 851)*

3. **SHUFFLE** A CD plays on random shuffle. The CD has 12 songs on it. Your CD player selects a song at random, plays it, then selects a second song at random. No song is repeated until every song has been played. What is the probability that song 3 is played first and song 1 is played second? *(p. 851)*

Evaluate the expression.

4. $_5P_4$ *(p. 851)*   5. $_8P_5$ *(p. 851)*   6. $_5C_2$ *(p. 856)*   7. $_8C_5$ *(p. 856)*

8. **NUMBER TILES** Tiles numbered 1–30 are placed in a bag. You select a tile at random. Find the probability that you select an odd number or a prime number. Are the events mutually exclusive or overlapping? *Explain*. *(p. 861)*