- 1. Four groups must present their final projects to the class. The groups are listed alphabetically from Group A through Group D. The teacher will randomly choose a group to present their project first.
 - a. Describe the entire sample space of this event.

7-4 Additional Practice

- **b.** List all the outcomes and their probabilities.
- The spinner shown at the right is used to play a game. Develop a complete probability model for one spin.

- 3. A box contains green marbles and blue marbles. Yosef shakes the box and randomly draws a marble. He records the color in the table at the right and places the marble back into the box. Yosef repeats the process 50 times.
 - a. Develop a complete probability model for choosing a marble.
 - **b.** Based on the experimental probability, about how many times will Yosef draw a green marble if he draws a total of 75 marbles?
- The table shows data from a random survey of juice preferences.
 - a. List the events from the sample space and their probabilities based on the experimental probability.
 - **b.** Based on the experimental data, how many of 400 juice drinkers would be expected to prefer apple or kale juice? Explain.





Type of Juice	Number of People
Orange	75
Apple	112
Kale	63





Scan for Multimedia



- **5. Higher Order Thinking** A survey of 600 people was conducted to find their favorite book genre. The survey results are shown in the table at the right.
 - a. How many people responded with a genre other than one of the genres listed?
 - **b.** Develop a complete probability model to describe all possible responses, including 'other' as one response.

Genre	Number of People
Adventure	102
Comedy	114
Mystery	84
Romance	132

©) Assessment Practice

- 6. An unfair spinner has sections labeled 1, 2, or 3 that are all twice as large as each of the sections labeled 4, 5, or 6. Given that $P(1) = \frac{2}{9}$, $P(2) = \frac{2}{9}$, $P(3) = \frac{2}{9}$, choose the statements that correctly complete the probability model for one spin of the spinner.
 - (a) $P(4) = \frac{1}{4}$, $P(5) = \frac{1}{4}$, $P(6) = \frac{1}{12}$
 - (B) $P(4) = \frac{1}{q}$, $P(5) = \frac{1}{q}$, $P(6) = \frac{2}{q}$

©
$$P(4) = \frac{1}{q}, P(5) = \frac{1}{q}, P(6) = \frac{1}{q}$$

(D)
$$P(4) = \frac{1}{12}$$
, $P(5) = \frac{1}{12}$, $P(6) = \frac{1}{4}$

7. A bag contains green, orange, and purple tennis balls. Corey shakes the bag, randomly selects a tennis ball, records the color in the table shown, and places the ball back into the bag. Corey repeats this process 40 times.

Tennis Balls

Green	Orange	Purple
15	18	7

PART A

Develop a probability model to describe all possible outcomes of a random selection from the bag.

PART B

Based on the experimental data, what can Corey conclude about the probability of randomly selecting an orange tennis ball?



