# Scan for Multimedia 

1. Samira is playing a game with the spinner shown.

a. What is the theoretical probability that the pointer will land in a section labeled with the letter A on a given spin? Write as a fraction.
b. Predict how many times the pointer will land in a section labeled with the letter A after 300 spins.
2. The same number of 7 th and 8 th graders attend Morgan's school. A student is randomly chosen to raise the flag each day. About how many times is it expected that a 7th grader will raise the flag during the next 30 days of school?
3. A deck of 70 flashcards is numbered 1 through 70. Find the theoretical probability of randomly selecting a card labeled with an even number from the deck of flashcards. Record the answer as a simplified fraction.
$P$ (even number) $=\square$
4. The spinner below is divided into eight equal parts. Find the theoretical probability described below as a fraction.

$P($ greater than 2$)=$ $\square$
5. Raquel, Richard, Hanne, and Lenny equally split the price of one season ticket so they can take turns attending baseball games. If a season ticket includes 68 games, how many games should Raquel expect to attend this season?
6. A number solid with faces labeled 1 through 16 is rolled. What is the probability that the number 16 will appear facing up when the solid is rolled? Record the answer as a simplified fraction.

7. A 12 -sided solid has faces numbered 1 through 12.
a. Find the probability of rolling a number greater than 5 .
b. If the 12 -sided solid is rolled 180 times, how many times
would you expect either a 3,9 , or 11 to be rolled?
8. Camille rolls two number cubes together and records the sum. If she does this 180 times, how many times should she expect the sum to be 7 ? Explain your answer.

|  |  | 2nd number cube |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1st | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| cube | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

9. Based on statistics for the past several seasons, the probability that the best player on a basketball team makes a free throw is $\frac{8}{10}$. The probability that the second-best player makes a free throw is $\frac{13}{20}$. If both players attempt 140 free throws over a season, how many more free throws is the best player expected to make?
10. Higher Order Thinking Noah randomly selects one of his eight different pairs of shoes to wear each day. Of his eight pairs of shoes, Noah has two pairs of boots and one pair of loafers. For how many days of the next 264 is it expected that Noah will wear either boots or loafers?

## Assessment Practice

11. The spinner at the right is divided into 8 equal sections.

PART A Find the theoretical probability described below. Write your answer as a simplified fraction.
$P($ number less than 6$)=\square$

## PART B

About how many times would you expect the pointer
 to land on a number less than 6 if the pointer is spun 30 times? Explain your answer.
$\square$

