LESSON 11-3

Problem Solving

Experimental Probability

Write the correct answer as a fraction in simplest form.

This table shows a breakdown by format of total music sales in the United States in 2004.

1. What is the experimental probability that a music purchase in 2004 was a CD?

2. What is the experimental probability that a music purchase in 2004 was **not** a CD?

Total American Music Sales in 2004

Format	Total
CD	97
Digital Single	3

3. What is the experimental probability that a music purchase in 2004 was a digital single?

Write your answer as a fraction, decimal, and percent.

4. Poonam counts 9 classmates out of 36 people in the library. What is the experimental probability that the next person will be a classmate? Not a classmate?

P(classmate)

P(not a classmate)

5. Macy makes 15 of 20 free throws at basketball practice. What is the experimental probability that she will make her next free throw? Miss?

P(make it)

P(miss it)

6. Tina spun a spinner 70 times in an experiment and recorded the results in the table below. Calculate the probability of landing on each color as a fraction and percent.

Outcome	Number of times spinner landed on the color	Probability as a fraction	Probability as a percent
Blue	22		
Red	35		
Green	13		

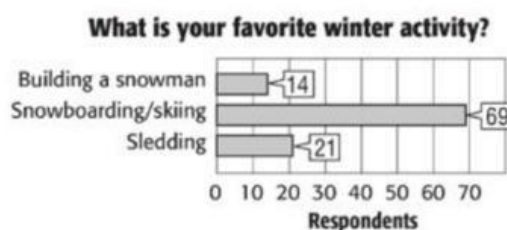Holt McDougal Mathematics

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7. A spinner marked with four sections blue, green, yellow, and red was spun 100 times. The results are shown in the table.

    a. Find the experimental probability of landing on green.

    b. Find the experimental probability of landing on red.

Section	Frequency
Blue	14
Green	10
Yellow	8
Red	68

8. Students took a survey on their favorite winter activity. The results of the experiment are in the graph below.

What is your favorite winter activity?

Building a snowman — 14
Snowboarding/skiing — 69
Sledding — 21

0 10 20 30 40 50 60 70
Respondents

    a. What is the experimental probability someone chose Building a snowman? Write your answer as a fraction, decimal, and percent.

    b. What is the experimental probability someone DID NOT choose Building a snowman? Write your answer as a fraction, decimal, and percent.

9. Students took a survey on their favorite entertainment. The results of the experiment are in the graph below.

Best Entertainment Value	
Type of Entertainment	**Percent**
Playing Interactive Games	48
Reading Books	22
Renting Movies	10
Going to Movie Theaters	10
Surfing the Internet	9
Watching Television	1

    a. What is the relative frequency that someone chose Renting movies? Write your answer as a percent.

    b. What is the relative frequency that someone chose NOT Renting movies? Write your answer as a percent.

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