

LESSON
11-6

Study Guide



Part A

Write the number that matches the descriptions.

1. 7 in the ten-thousands place
 5 in the ones place
 2 in the hundred-thousands place
 1 in the tens place
 8 in the thousands place, and
 4 in the hundreds place

2 7 8, 4 1 5

2. Write a number that is 20,000 more than the number in Problem 1.

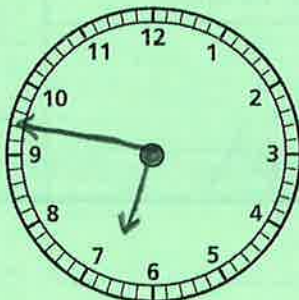
2 9 8, 4 1 5

3. Read the number below to yourself.
 Circle the digit that means seventy thousand.
 Underline the digit that means seven hundred.

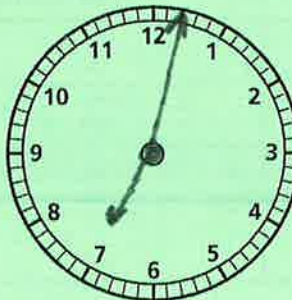
707,777

4. Last night, Casey started reading at 6:47 p.m. She stopped reading $\frac{1}{4}$ hour later. Draw hands on the clock face in Problem 4a to show the time she started reading. Draw hands on the clock face in Problem 4b to show the time she stopped reading.

a.

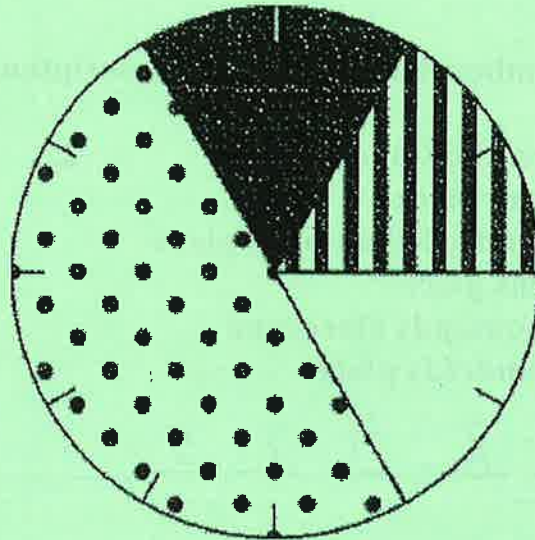


b.



5. Shade the oval next to each statement that is true for the spinner.

- You are equally likely to get dots or black.
- You are less likely to get stripes than dots.
- You are more likely to get dots than white.
- You are certain to get stripes.



6. What fraction of the spinner in Problem 5 is covered with white? $\frac{1}{6}$

7. What fraction of the spinner in Problem 5 is covered with dots? $\frac{1}{2}$ or $\frac{3}{6}$

8. Use the spinner from Problem 5. Predict the number of times a paper clip might land on each section of the spinner if you spin 12 times. Record your predictions in the second column of the table. Then take a paper clip and actually spin 12 times. Record your results in the third column of the table.

Section of the Spinner	Predicted Results for 12 Spins	Actual Results for 12 Spins
black	2	<i>Results will vary</i>
white	2	
stripes	2	
dots	6	

$\frac{1}{6}$ of 12 = 2
 $\frac{1}{6}$ of 12 = 2
 $\frac{1}{6}$ of 12 = 2
 $\frac{1}{2}$ of 12 = 6

Part B

9. Explain why your actual results may be different from your predictions in Problem 8.

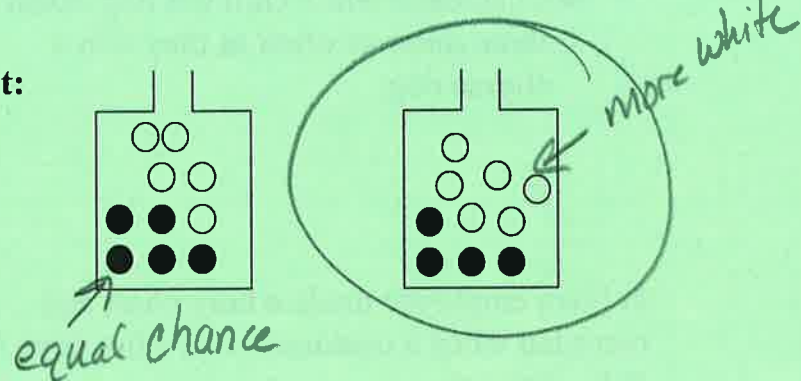
My prediction is based on the fractions of the spinner. My actual results are based on where a paper clip pointed. If I spin lots of times, the actual results will probably come closer to my prediction.

Read the description of random draws. Circle the picture of the jar that best matches the description.

10. From 100 random draws you get:

a black marble ● 36 times.

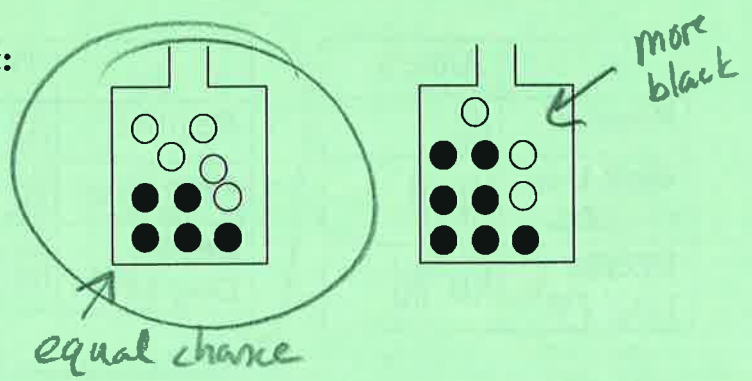
a white marble ○ 64 times.



From 50 random draws you get:

a black marble ● 26 times.

a white marble ○ 24 times.



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Open Response



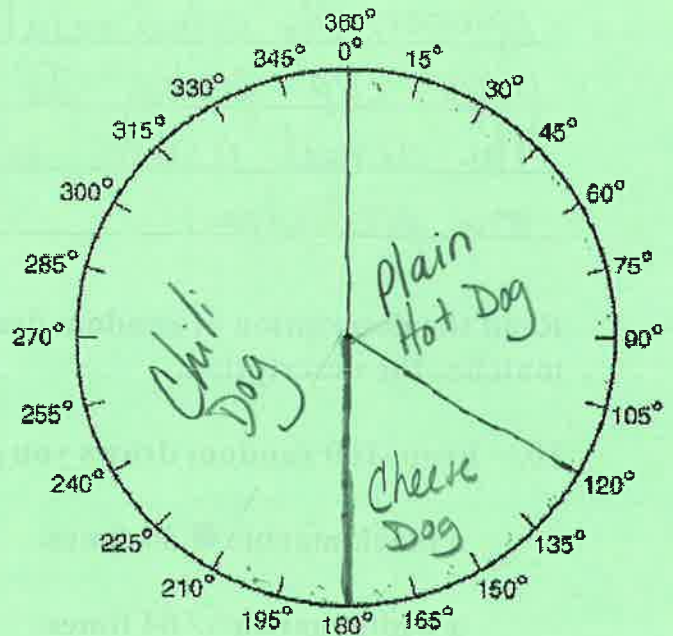
The Sandwich Spinner

At **Barbara's Hot Dog Shop**, customers spin a spinner to ~~win~~ ^{win} one of three free hot dogs.

Spin to Win a Free Hot Dog!

1. Make a spinner so that the following statements are true:

- ◆ About 1/3 the time customers win **plain** hot dogs.
- ◆ Customers win a chili hot dog about *three times* as often as they win a cheese dog.



2. Each employee made a tally chart and recorded when a customer won a hot dog. At the end of the day, their tally charts did not match.

	Albie's
Regular	
Chili Dog cheese	
Cheese Dog chili	

	Theresa's
Regular	
Chili Dog cheese	
Cheese Dog chili	

	Melissa's
Regular	
Chili Dog cheese	
Cheese Dog chili	

Which employee's tally chart is most likely to be correct?

Explain how you found your answer.

Theresa's is most likely correct because according to the spinner Chili Dog should be selected the most by a large amount. Next should be regular and least should be cheese.