Name _____ Date _____

1. The probability of an event is 15%. Describe the likelihood of the event.

2. You randomly draw a marble from a bag, record its color, and then replace it. You draw a blue marble 3 out of 50 times. What is the experimental probability that the next marble will be blue?

3. There are 6 red marbles and 11 orange marbles in a bag. You randomly choose one of the marbles. What is the probability of choosing a red marble?

4. Use the table to predict the number of times you will spin 4 when you spin the spinner 100 times.

Spinning a Spinner						
Number spun	1	2	3	4	5	6
Times spun	11	8	10	7	7	7

5. You toss a coin 500 times. The results are 265 heads and 235 tails. How does experimental probability of getting tails compare with the theoretical probability? (Experimental: from the experiment Theoretical: How many sides of coin?)

6. You roll a six-sided number cube. What is the theoretical probability of rolling a number greater than 5?

7.

Which data display is misleading?

Storage Space	Storage Space

Year

Year
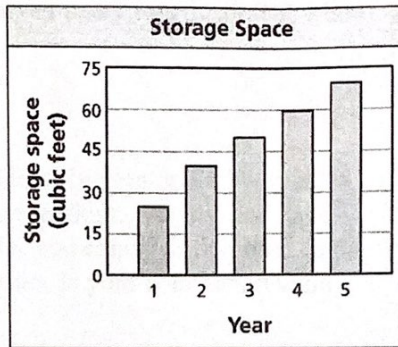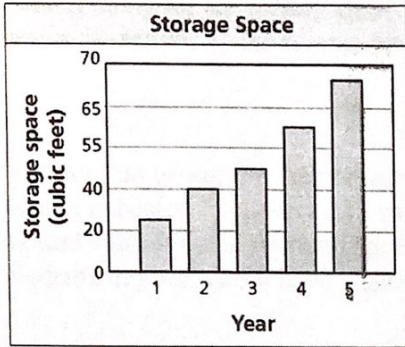
1. The stem-and-leaf plot shows the numbers of trees planted by 12 classes. Find the mean, median, and mode of the data. Round to the nearest tenth, if necessary.

Trees Planted

Stem	Leaf
0	5 5 8
1	0 0 2 5 5 8
2	0 2 3

Key: 2|0 = 20

Mean =   Median =   Mode =

2. The data set shows the prices of several brands of running shoes at a sporting goods store. Find the range and interquartile range of the data. {$60, $40, $112, $78, $98, $55}

3. Identify the outlier in the data set. {23, 20, 28, 25, 28, 22, 20, 25, 25, 24, 70, 25}

4.

Youwant to estimate the number of students in your school who support extra funding for the history club. You survey every fourth student who enters the school. Is the sample biased?

5. You want to determine the number of students in your school who have visited a theater. You survey 35 students at random. Twenty-one have visited a theater, and fourteen have not. So, you conclude that 60% of the students in your school have visited a theater. Is your conclusion valid?
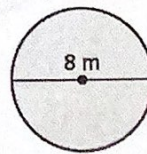
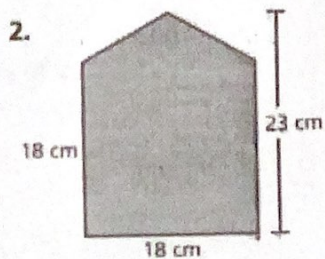**Chapter 8** **Exam Review**

Find the area of the figure.

1.

18 cm

9 cm

2.

6 ft

7 ft

12 ft
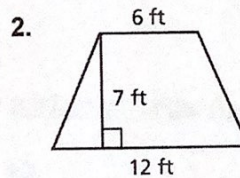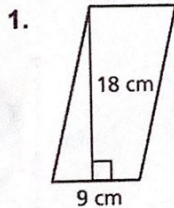
3. Find the circumference of the circle.

44 in.
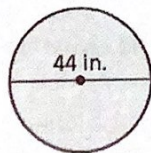
4. Find the area of the circle.

8 m

5. Find the area of the figure.

2.

23 cm

18 cm

18 cm

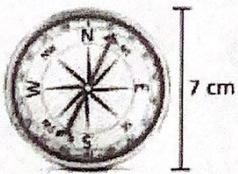**6.** Find the missing dimension of the trapezoid.
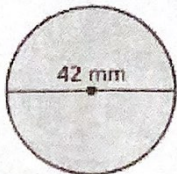
Area = 882 ft^2

42 ft

h

21 ft
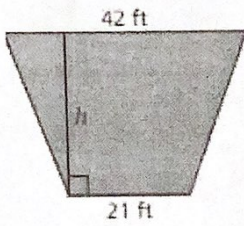
7. What is the radius of a circular lid with a diameter of 5 centimeters?

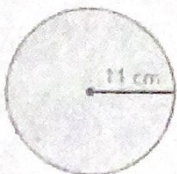8. The radius of a circle is 25 millimeters. Find the diameter.

9. Find the circumference.

7 cm

13. Find the **perimeter** of the figure. Add all sides.

12

5

5

13

10. Find the area of the circle.

42 mm

11. Find the area of the circle.

11 cm