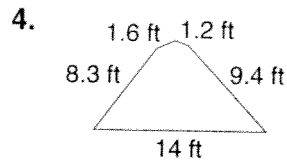
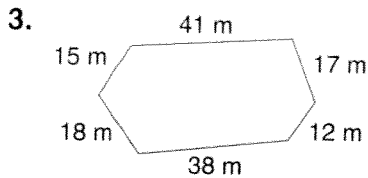
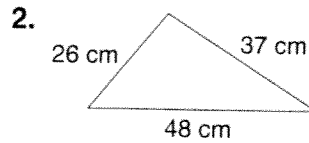
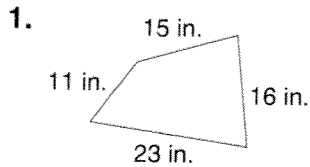
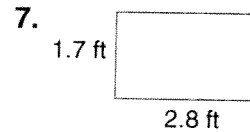
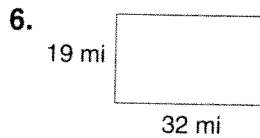
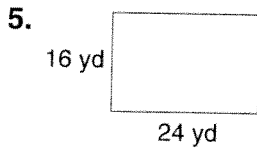


**LESSON** **Practice B**  
**10-1** *Finding Perimeter*

Find the perimeter of each figure.

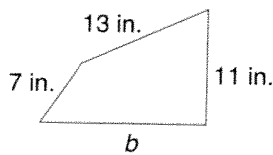


Find the perimeter  $P$  of each rectangle.

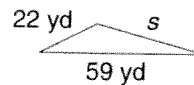


Find the unknown measure.

8. What is the length of side  $b$  if the perimeter equals 47 in.?



9. What is the length of side  $s$  if the perimeter equals 119 yd?

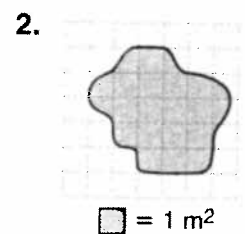
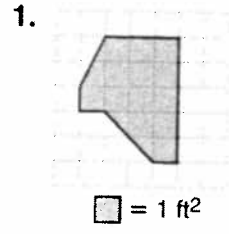


10. Benjamin is putting a fence around his rectangular-shaped yard. The yard is 38 feet long and 27 feet wide. How many feet of fencing does Benjamin need to surround his entire yard?

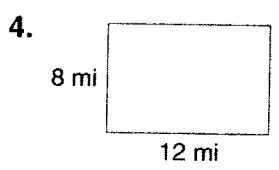
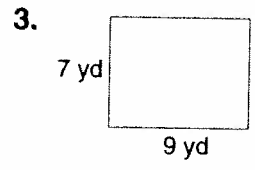
11. If you drove from Bakersville to Salem and then to San Mateo, your entire 81-mile journey would form a triangle. The distance from Salem to San Mateo is 24 miles. The distance from Bakersville to San Mateo is 40 miles. How many miles is it from Salem to Bakersville?

**LESSON** **10-2** **Practice B**  
**Estimating and Finding Area**

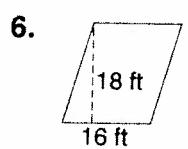
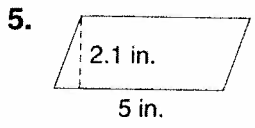
Estimate the area of each figure.



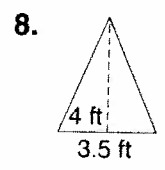
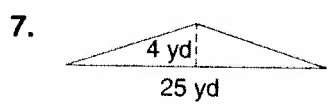
Find the area of each rectangle.



Find the area of each parallelogram.



Find the area of each triangle.



9. A section of a stained-glass window is shaped like a parallelogram. Its base is 6.5 inches, and its height is 4 inches. How much glass is needed to cover the section completely?

\_\_\_\_\_

10. Your rectangular yard is 10 feet wide and 26 feet long. How many square feet of grass do you need to plant if you want to cover the entire yard?

\_\_\_\_\_

**LESSON**  
**10-5** **Practice B**  
**Circles**

Use the circle to answer each question.

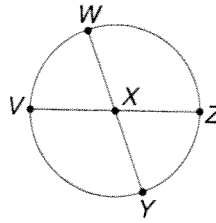
1. Name the circle. \_\_\_\_\_

2. Name two diameters.

\_\_\_\_\_

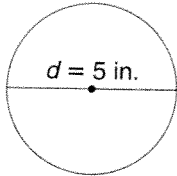
3. Name four radii.

\_\_\_\_\_



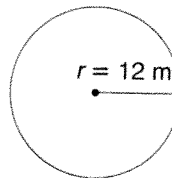
Find each missing value to the nearest hundredth.  
Use 3.14 for  $\pi$ .

4.



$C =$  \_\_\_\_\_

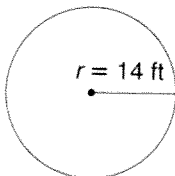
5.



$C =$  \_\_\_\_\_

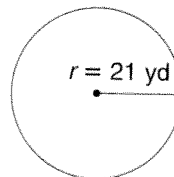
Find the area of each circle. Use  $\frac{22}{7}$  for  $\pi$ .

6.



$A =$  \_\_\_\_\_

7.



$A =$  \_\_\_\_\_

8. The first Ferris wheel was built in 1893 in Chicago. Its diameter was 250 feet. How many feet did the Ferris wheel rotate with each complete turn? Use 3.14 for  $\pi$ .

\_\_\_\_\_

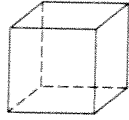
9. Stonehenge, a circle of large carved stones in England, was built more than 1,000 years ago. The circle of stones has a diameter of 108 feet. About how many square feet of land does Stonehenge cover? Use  $\frac{22}{7}$  for  $\pi$ .

\_\_\_\_\_

**LESSON**  
**10-6** **Practice B**  
**Solid Figures**

Identify the number of faces, edges, and vertices in each solid figure.

1.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2.

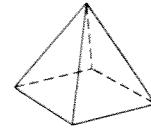


\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tell whether each figure is a polyhedron and name the solid.

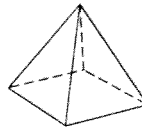
4.



\_\_\_\_\_

\_\_\_\_\_

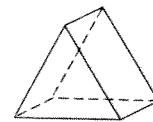
5.



\_\_\_\_\_

\_\_\_\_\_

6.



\_\_\_\_\_

\_\_\_\_\_

7. Kelly wants to make a box in the shape of a cube. How many pieces of wood does she need? In what shape should she cut them? Explain.

\_\_\_\_\_

8. Kwan made a sculpture in the shape of a polyhedron. It only has one base that is a triangle. What solid figure is her sculpture? Explain your reasoning.

\_\_\_\_\_

\_\_\_\_\_

**LESSON**  
**10-1** **Problem Solving**  
**Finding Perimeter**

Write the correct answer.

1. Use a ruler to find the perimeter of your math textbook in inches.

\_\_\_\_\_

\_\_\_\_\_

2. Use a ruler to find the perimeter of your desk in feet and inches.

\_\_\_\_\_

\_\_\_\_\_

3. The world's largest flag weighs 3,000 pounds and requires at least 500 people to set up! This United States flag is 505 feet long and 255 feet wide. What is the perimeter of this United States flag?

\_\_\_\_\_

4. Students in Lisbon, Ohio, built the world's largest mousetrap in 1998. The mousetrap is 9 feet 10 inches long and 4 feet 5 inches wide—and it actually works! What is the perimeter of the mousetrap in feet and inches?

\_\_\_\_\_

5. The giant ball dropped every New Year's Eve in New York City is covered with 504 crystal equilateral triangles. The average perimeter of each triangle is  $15\frac{3}{4}$  inches. What is the average side length of each crystal triangle on the ball?

\_\_\_\_\_

6. United States dollar bills are 2.61 inches wide and 6.14 inches long. Larger notes in circulation before 1919 measured 3.125 inches wide by 7.4218 inches long. What is the difference between the old and new dollar bill perimeters?

\_\_\_\_\_

Circle the letter of the correct answer.

7. The perimeter of regular octagon-shaped swimming pool is 42 feet. What is the length of each side of the pool?

- A** 5 feet                      **C** 5 feet 2 inches  
**B** 5 feet 3 inches      **D** 5.2 feet

8. Each Scrabble® tile is 1.8 centimeters wide and 2.1 centimeters tall. If the tiles spell the word LOVE, what is the perimeter of the entire word?

- F** 7.8 cm                      **H** 12 cm  
**G** 18.6 cm                  **J** 31.2 cm

**LESSON**  
**10-2** **Problem Solving**  
**Estimating and Finding Area**

Use the table to answer each question.

**State Information**

State	Approx. Width (mi)	Approx. length (mi)	Water Area (mi <sup>2</sup> )
Colorado	280	380	376
Kansas	210	400	462
New Mexico	343	370	234
North Dakota	211	340	1,724
Pennsylvania	160	283	1,239

- New Mexico is the 5th largest state in the United States. What is its approximate total area?  
\_\_\_\_\_
- Kansas is the 15th largest state in the United States. What is its approximate total area?  
\_\_\_\_\_
- What is the difference between North Dakota's land area and water area?  
\_\_\_\_\_
- What is Pennsylvania's approximate land area?  
\_\_\_\_\_
- What is the difference between Colorado's land area and Pennsylvania's land area?  
\_\_\_\_\_
- About what percent of the total area of Pennsylvania is covered by land?  
\_\_\_\_\_

**Circle the letter of the correct answer.**

- Rhode Island is the smallest state. Its total land area is approximately 1,200 mi<sup>2</sup>. Rhode Island is approximately 40 miles long. About how wide is Rhode Island?  
**A** about 20 mi  
**B** about 40 mi  
**C** about 50 mi  
**D** about 30 mi
- The entire United States covers 3,794,085 square miles of North America. About how much of that area is not made up of the 5 states in the chart?  
**F** 2,537,470 mi<sup>2</sup>  
**G** 3,359,755 mi<sup>2</sup>  
**H** 3,686,525 mi<sup>2</sup>  
**J** 3,1310,818 mi<sup>2</sup>

**LESSON**  
**10-5** **Problem Solving**  
**Circles**

Use the table to answer each question. Use 3.14 for  $\pi$ .

1. Which coin has the smallest radius?  
How long is that coin's radius?

\_\_\_\_\_

2. What is the circumference of a nickel?

\_\_\_\_\_

3. What is the area of a quarter?

\_\_\_\_\_

4. Which coin has a greater area, a dollar or half dollar? What is the difference in their areas?

\_\_\_\_\_

5. If you rolled a dollar coin on its edge, how far would it go with each complete turn?

\_\_\_\_\_

7. An engraving of Thomas Jefferson's home, Monticello, covers about  $\frac{1}{3}$  of a nickel's tails side. What is the area of the Monticello etching?

\_\_\_\_\_

**Official U.S. Coin Sizes**

Coin	Diameter (rounded to nearest mm)
Penny	19
Nickel	21
Dime	18
Quarter	24
Half Dollar	31
Dollar	27

6. Which U.S. coins will fit in a vending machine coin slot that is 2 centimeters wide?

\_\_\_\_\_

8. The engraved words "United States of America" run about one-half the circumference of all U.S. coins. On which coin will the words run about 38 mm?

\_\_\_\_\_

**Circle the letter of the correct answer.**

9. A dime has 118 ridges evenly spaced along its circumference. About how wide is each ridge?

- A about 0.24 mm  
B about 0.48 mm  
C about 0.15 mm  
D about 0.08 mm

10. Your two coins together cover an area of about  $540 \text{ mm}^2$ . How much money do you have?

- F \$0.11                      H \$1.10  
G \$1.50                      J \$0.35

**LESSON**  
**10-6** **Problem Solving**  
**Solid Figures**

Write the correct answer.

1. Pamela folded an origami figure that has 5 faces, 8 edges, and 5 vertices. What kind of solid figure could Pamela have created?

\_\_\_\_\_  
\_\_\_\_\_

2. Look at your classroom chalkboard. What kind of solid figure is the board eraser? What kind of solid figure is the chalk?

\_\_\_\_\_  
\_\_\_\_\_

3. If you cut a cylinder in half between its two bases, what two solid figures are formed?

\_\_\_\_\_

4. You have two hexagons. How many rectangles do you need to create a hexagonal prism?

\_\_\_\_\_

5. A museum needs to ship a sculpture that has a curved lateral surface and one flat circular base. In what shape box should they mail the sculpture?

\_\_\_\_\_

6. A glass prism reflects white light as a multicolored band of light called a spectrum. The prism has 5 glass faces with 9 edges and 6 vertices. What kind of prism is it?

\_\_\_\_\_

7. All of the faces of a paperweight are triangles. Is this enough information to classify this solid figure? Explain.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Paulo says that if you know the number of faces a pyramid has, you also know how many vertices it has. Do you agree? Explain.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Circle the letter of the correct answer.

9. How is a triangular prism different from a triangular pyramid?
- A The prism has 2 bases.
  - B The pyramid has 2 bases.
  - C All of the prism's faces are triangles.
  - D The pyramid has 5 faces.

10. Which of these statements is not true about a cylinder?
- F It has 2 circular bases.
  - G It has a curved lateral surface.
  - H It is a solid figure.
  - J It is a polyhedron.