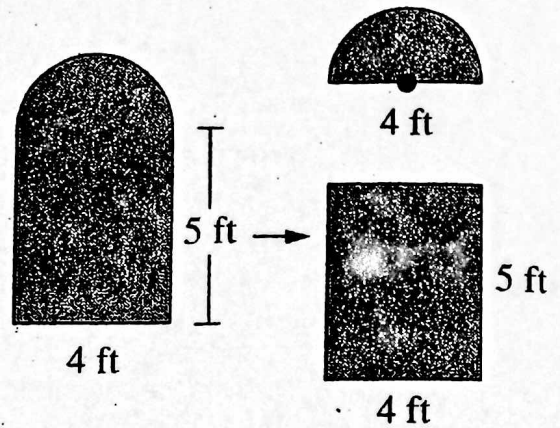


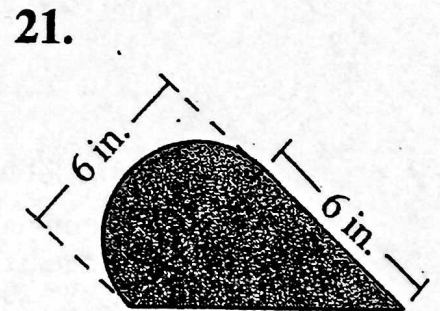
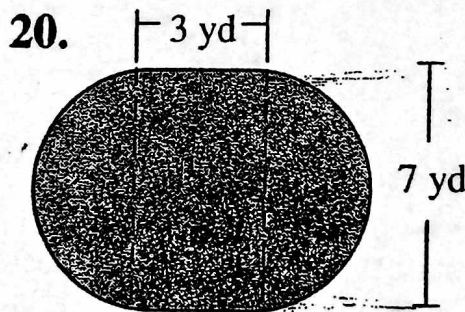
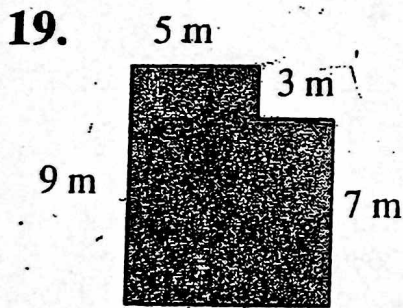
## PROBLEM SOLVING/APPLICATION

A **composite** figure is made up, or *composed*, of two or more familiar geometric figures. For instance, the figure at the right is composed of a rectangle and a half-circle. The half-circle is called a **semicircle**.

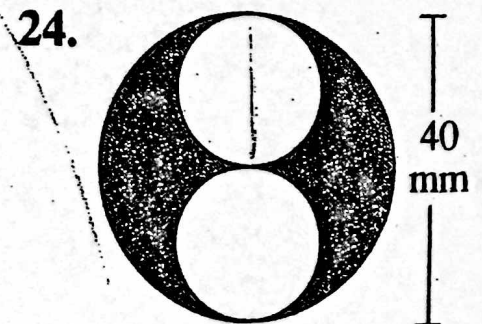
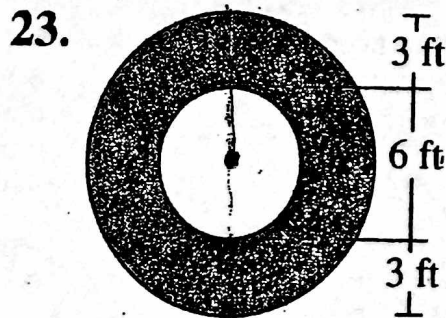
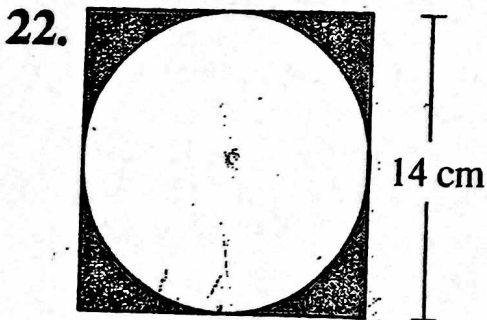


15. How do you think you can find the area of a semicircle?
16. What is the area of the semicircle in the figure above?
17. What is the area of the rectangle in the figure above?
18. What is the total area of the figure above?

**Find the area of each composite figure.**



**Finding the area of some composite figures involves subtracting areas rather than adding. In each figure, find the area of the shaded region.**



## LESSON

**Problem Solving****9-2****Perimeter and Circumference**

Write the correct answer.

1. Mr. Marcos, the gym teacher, had the seventh graders run around the perimeter of the gym 3 times. The gym has a length of 34 feet and a width of 58 feet. What was the total distance the students ran?  
\_\_\_\_\_
2. The distance between bases on a baseball field is 90 feet. If 3 players hit home runs during a game and each runs around all 4 bases, what is the total distance the players run?  
\_\_\_\_\_
3. Basketball rims have a diameter of 18 inches. If you want to put a band around a basketball rim, how much material to the nearest tenth of an inch will you need?  
\_\_\_\_\_
4. A pizza cutter has a diameter of 2.5 inches. To cut a pizza in half, the cutter makes two complete revolutions. What is the diameter of the pizza?  
\_\_\_\_\_
5. A round stained-glass window has a circumference of 195 inches. What is the radius of the window to the nearest inch?  
\_\_\_\_\_
6. A planter full of pansies has a diameter of 14 inches. What is the circumference of the planter to the nearest inch?  
\_\_\_\_\_

Choose the letter of the correct answer.

7. A welcome mat on the front porch is a semicircle. The straight side of the mat is 36 inches. What is the perimeter of the mat?  
A 92.52 in.            C 56.52 in.  
B 64.26 in.            D 28.26 in.
8. The radius of the planet Jupiter is about 44,368 miles. What is the approximate circumference of Jupiter to the nearest mile?  
F 557,262 mi            H 139,316 mi  
G 278,631 mi            J 69,658 mi
9. Four square tables with sides of 48 inches each are placed end to end to form one big table. What is the perimeter of the table that is formed?  
A 192 in.            C 480 in.  
B 384 in.            D 768 in.
10. Three sides of the Great Pyramid at Giza, Egypt, each measure 756 feet in length to the nearest foot. If the perimeter of the pyramid is 3,023 feet, what is the length of the fourth side of the pyramid?  
F 754 ft            H 756 ft  
G 755 ft            J 757 ft