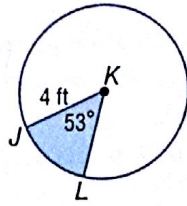Find the area of the shaded sector. Round to the nearest tenth.

3A.

4 ft, 53°, K, J, L
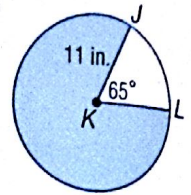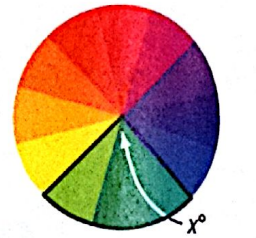
3B.


148°, 6 m, L, K, J

3C.

11 in., 65°, J, K, L
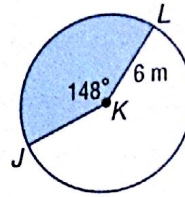
3D. CRAFTS The color wheel at the right is a tool that artists use to organize color schemes. If the diameter of the wheel is 10 inches and each of the 12 sections is congruent, find the approximate area covered by green hues.

x°

Check Your Understanding
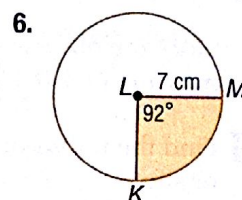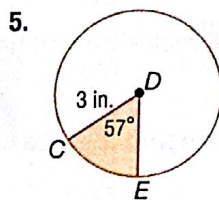
= Step-by-Step Solutions begin on page R20.

Example 1 **CONSTRUCTION** Find the area of each circle. Round to the nearest tenth.

1.

21 yd

2.

0.4 km
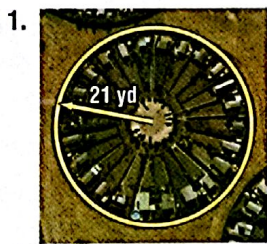
Example 2 Find the indicated measure. Round to the nearest tenth.

3 Find the diameter of a circle with an area of 74 square millimeters.

4. The area of circle is 88 square inches. Find the radius.

**Example 3** Find the area of each shaded sector. Round to the nearest tenth.

5.

3 in., 57°, D, C, E

6.

L, 7 cm, M, 92°, K

7. BAKING Chelsea is baking pies for a fundraiser at her school. She divides each 9-inch pie into 6 equal slices.

a. What is the area, in square inches, for each slice of pie?

b. If each slice costs $0.25 to make and she sells 8 pies at $1.25 for each slice, how much money will she raise?
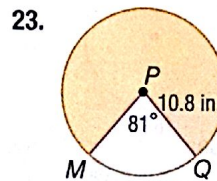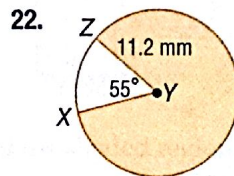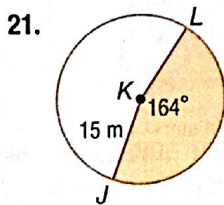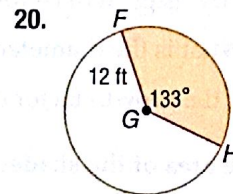
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Example 1 **SPORTS** Find the area of each circle. Round to the nearest tenth.

8.

3 ft

9.

5 yd

10.

8 ft

11.

4.25 in.

12.

18 in.

13.

10 ft
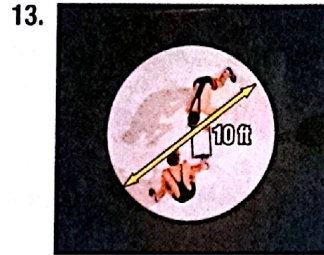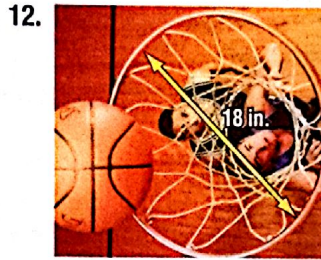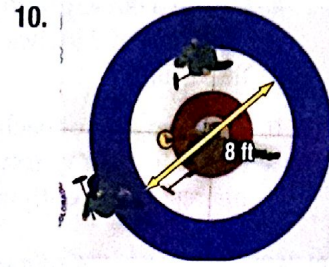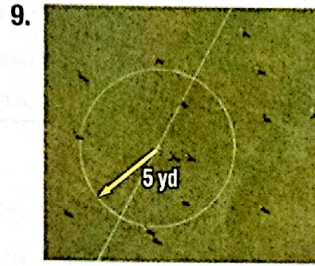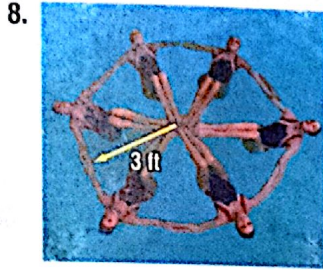
Example 2 Find the indicated measure. Round to the nearest tenth, if necessary.

14. The area of a circle is 68 square centimeters. Find the diameter.

15. Find the diameter of a circle with an area of 94 square millimeters.

16. The area of a circle is 112 square inches. Find the radius.

17. Find the radius of a circle with an area of 206 square feet.

Example 3 Find the area of each shaded sector. Round to the nearest tenth, if necessary.

18.

5 in.
46°
A
C
B

19

S
8 cm 72°
R
T

20.

F
12 ft
133°
G
H

21.

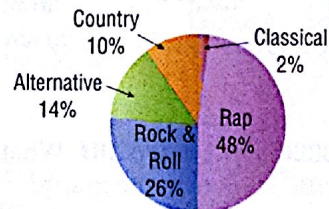L
K 164°
15 m
J

22.

Z
11.2 mm
55° Y
X

23.

P
10.8 in.
81°
M Q
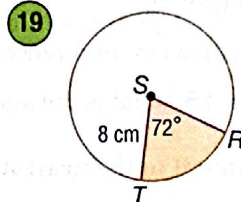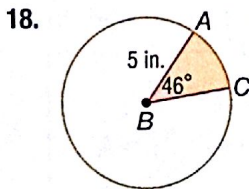
24. **MUSIC** The music preferences of students at Thomas Jefferson High are shown in the circle graph. Find the area of each sector and the degree measure of each intercepted arc if the radius of the circle is 1 unit.

Country 10%
Classical 2%
Alternative 14%
Rock & Roll 26%
Rap 48%

25. **JEWELRY** A jeweler makes a pair of earrings by cutting two 50° sectors from a silver disk.

a. Find the area of each sector.

b. If the weight of the silver disk is 2.3 grams, how many milligrams does the silver wedge for each earring weigh?

50°
50°
2 cm

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