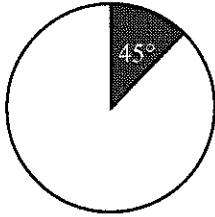


Lesson 9 ~ Area of Sectors

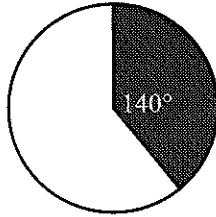
Name _____ Period _____ Date _____

Use a proportion to find the area of each shaded sector. Round to the nearest hundredth, as needed.

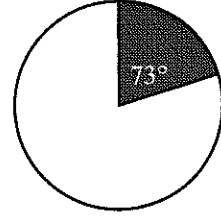
1. $A = 80 \text{ cm}^2$



2. $A = 18 \text{ ft}^2$



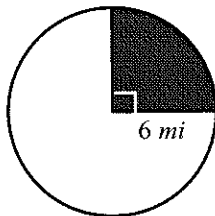
3. $A = 62.5 \text{ m}^2$



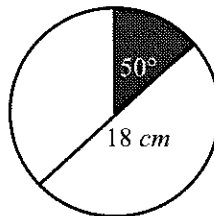
4. The total circular area a sprinkler can water is 240 ft^2 . The sprinkler is set to rotate back and forth in a 75° pattern. Find the amount of area that will get watered.
5. Roberto is designing a circular patio. He wants to divide the patio into 5 equal sectors. The radius of the patio will be 8 feet.
- Find the total area of the circular patio.
 - Find the degree measure of one sector.
 - Use a proportion to find the area of one sector.
6. A pie is sliced into equal pieces each with a central angle of 60° . Lexie ate one piece of pie. Lexie's slice was 8.73 in^2 . What is the area of a whole pie?

Find the area of each shaded region. Use 3.14 for π . Round answers to the nearest hundredth.

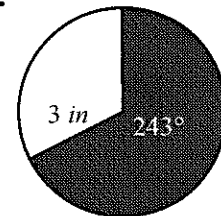
7.



8.



9.



10. A circular baby blanket is made of 10 different colors. Each color represents one sector of the blanket. The radius of the baby blanket is 20 inches.
- Find the total area of the baby blanket.
 - Find the area that one color represents.
11. A sector of a circle is 31.4 cm^2 . The measure of the sector's central angle is 50° . Find the area of the circle.