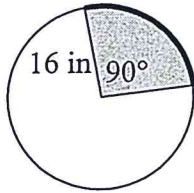# Arc Length-Sector Area   Name:_____

8. Calculate the sector area:

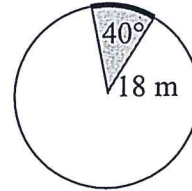   a.   b.   c.
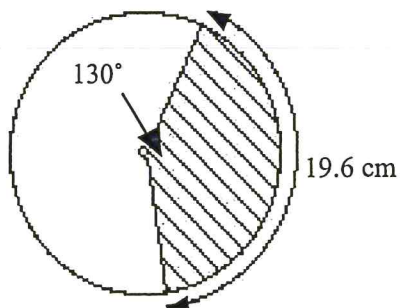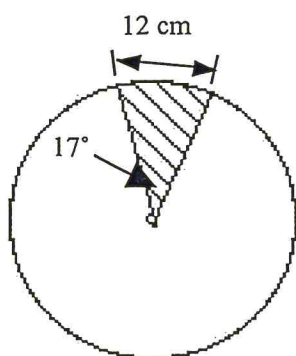
16 in 90°   8 m 135°   40° 18 m
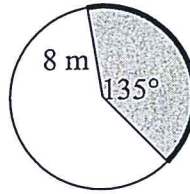
9. The area of a circle is 225π square inches. Find the area of the sector whose central angle is $45°$.

10. The central angle of a sector is $60°$ and the area of the circle is 144π. What is the area of the sector?

11. A circle has a radius of 12. Find the area of the sector whose central angle is $120°$.

12. Find the radius of a circle which has a sector area of 9π whose central angle is $90°$.

13. The central angle of a sector is $72°$ and the sector has an area of 5π. Find the radius.

14. Find the measure of the central angle of a sector if its area is 5π and the radius is 6.
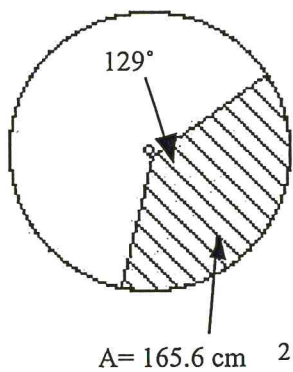
Find the radius. Round the nearest tenth.

5.

130°

19.6 cm

6.

12 cm

17°

7.

129°

A= 165.6 cm ^{2}

8.

A= 31.2 cm ^{2}

256°