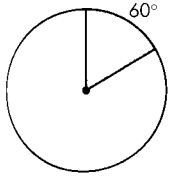


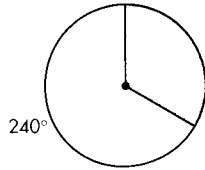
Exercise Set 9.6

Exercises 1-8, find the shaded area. The radius of each circle is r . If two circles are shown, r is the radius of the smaller and R is the radius of the larger. All given measurements are in centimeters.

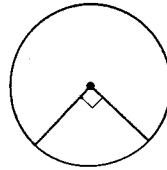
1. $r = 6$



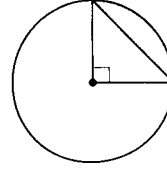
2. $r = 8$



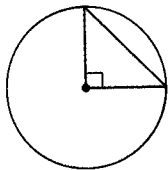
3.* $r = 16$



4. $r = 2$

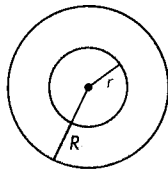


5. $r = 8$

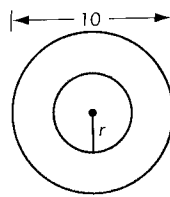


6.* $R = 7$

$r = 4$

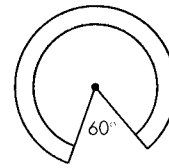


7. $r = 2$



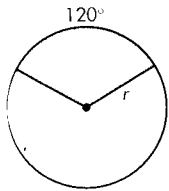
8. $R = 12$

$r = 9$

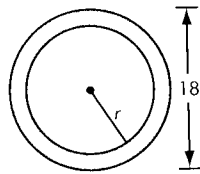


Exercises 9 and 10, find the radius. In Exercises 11 and 12 find $m\angle ABC$.

9.* The shaded area is $12\pi \text{ cm}^2$.

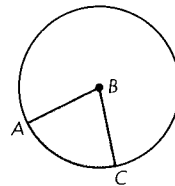


10. The area of the annulus is $32\pi \text{ cm}^2$.



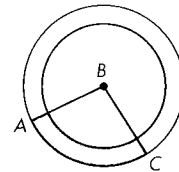
11. The shaded area is $120\pi \text{ cm}^2$.

$r = 24 \text{ cm}$



12. The shaded area is $10\pi \text{ cm}^2$.

$R = 10, r = 8$



Suppose the pizza slice in the photo at the beginning of this lesson is a sector with a 36° angle in a circle with a radius of 20 ft. If a can of tomato sauce will cover 3 ft^2 of pizza, how many cans would be required to cover this slice?

Exercises 14-17, what is the shaded area in each figure? In Exercises 15-17, the circles are externally tangent. The area of the circle or circles in each figure is what percentage of the area of the square? All given measurements are in centimeters.

