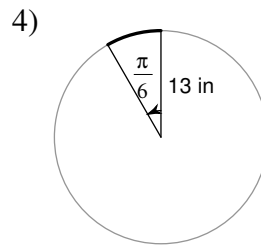
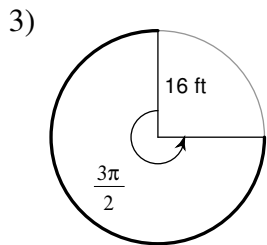
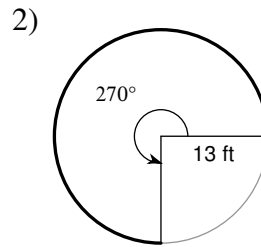
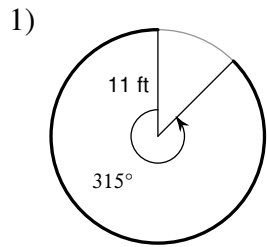


Arc Length and Sector Area

Find the length of each arc. Round your answers to the nearest tenth.



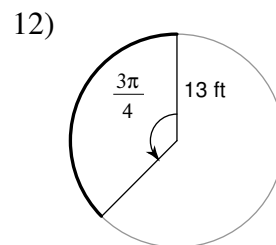
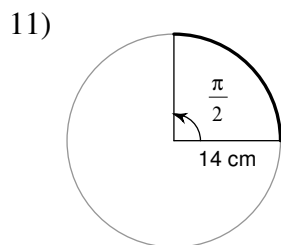
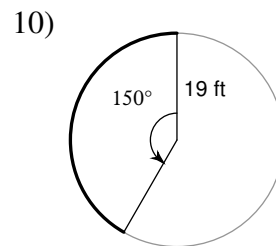
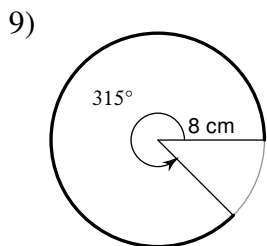
5) $r = 18 \text{ cm}, \theta = 60^\circ$

6) $r = 16 \text{ m}, \theta = 75^\circ$

7) $r = 9 \text{ ft}, \theta = \frac{7\pi}{4}$

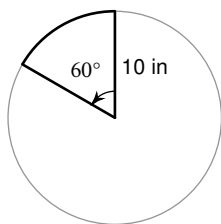
8) $r = 14 \text{ ft}, \theta = \frac{19\pi}{12}$

Find the length of each arc. Do not round.

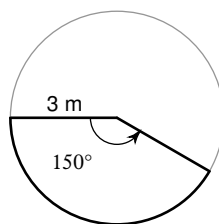


Find the area of each sector. Round your answers to the nearest tenth.

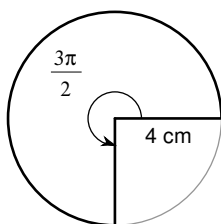
13)



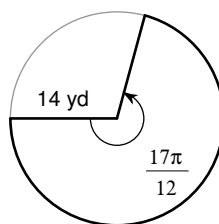
14)



15)

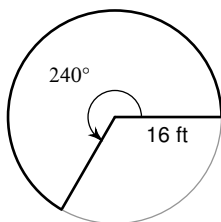


16)

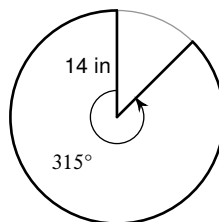


Find the area of each sector. Do not round.

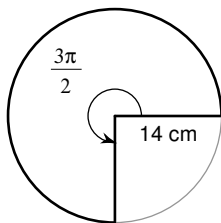
17)



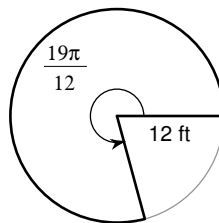
18)



19)



20)



21) $r = 10$ mi, $\theta = \frac{\pi}{2}$

22) $r = 12$ yd, $\theta = \frac{5\pi}{3}$

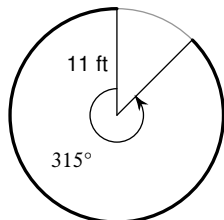
23) $r = 7$ km, $\theta = 60^\circ$

24) $r = 7$ mi, $\theta = 225^\circ$

Arc Length and Sector Area

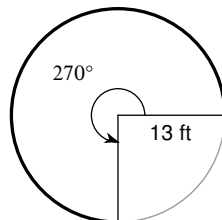
Find the length of each arc. Round your answers to the nearest tenth.

1)



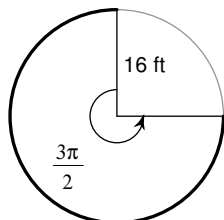
60.5 ft

2)



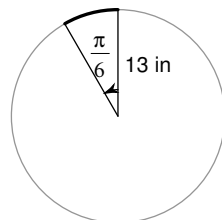
61.3 ft

3)



75.4 ft

4)



6.8 in

5) $r = 18$ cm, $\theta = 60^\circ$

18.8 cm

6) $r = 16$ m, $\theta = 75^\circ$

20.9 m

7) $r = 9$ ft, $\theta = \frac{7\pi}{4}$

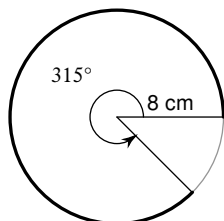
49.5 ft

8) $r = 14$ ft, $\theta = \frac{19\pi}{12}$

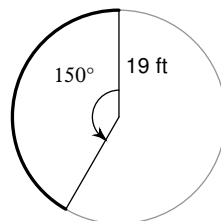
69.6 ft

Find the length of each arc. Do not round.

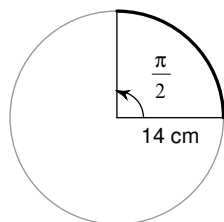
9)

 14π cm

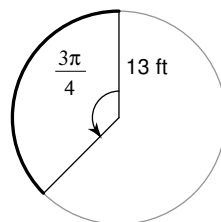
10)

 $\frac{95\pi}{6}$ ft

11)

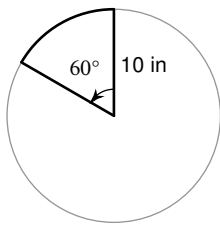
 7π cm

12)

 $\frac{39\pi}{4}$ ft

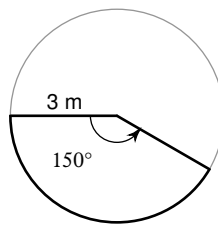
Find the area of each sector. Round your answers to the nearest tenth.

13)



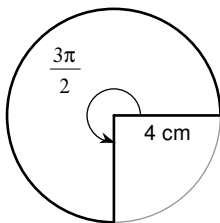
$$52.4 \text{ in}^2$$

14)



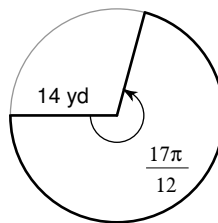
$$11.8 \text{ m}^2$$

15)



$$37.7 \text{ cm}^2$$

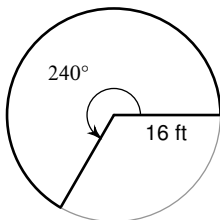
16)



$$436.2 \text{ yd}^2$$

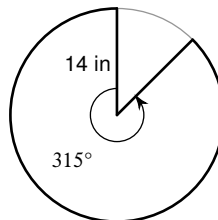
Find the area of each sector. Do not round.

17)



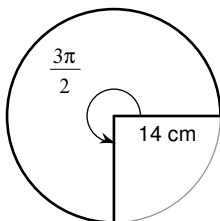
$$\frac{512\pi}{3} \text{ ft}^2$$

18)



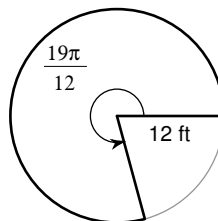
$$\frac{343\pi}{2} \text{ in}^2$$

19)



$$147\pi \text{ cm}^2$$

20)



$$114\pi \text{ ft}^2$$

21) $r = 10 \text{ mi}, \theta = \frac{\pi}{2}$

$$25\pi \text{ mi}^2$$

22) $r = 12 \text{ yd}, \theta = \frac{5\pi}{3}$

$$120\pi \text{ yd}^2$$

23) $r = 7 \text{ km}, \theta = 60^\circ$

$$\frac{49\pi}{6} \text{ km}^2$$

24) $r = 7 \text{ mi}, \theta = 225^\circ$

$$\frac{245\pi}{8} \text{ mi}^2$$