

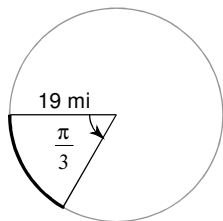
Arc Length and Sectors WS #1

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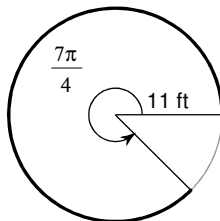
Date _____ Period _____

Find the length of each arc.

1)



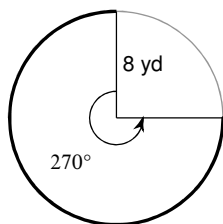
2)



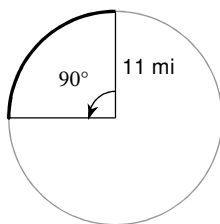
3) $r = 14 \text{ m}, \theta = \frac{7\pi}{4}$

4) $r = 15 \text{ yd}, \theta = \frac{\pi}{3}$

5)



6)

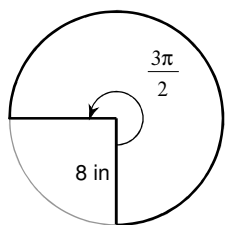


7) $r = 4 \text{ km}, \theta = 45^\circ$

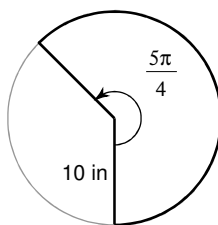
8) $r = 13 \text{ yd}, \theta = 210^\circ$

Find the area of each sector.

9)



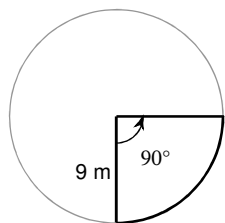
10)



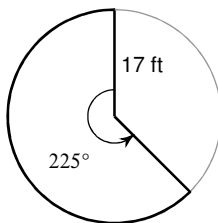
11) $r = 6$ km, $\theta = \frac{\pi}{3}$

12) $r = 11$ km, $\theta = \frac{5\pi}{6}$

13)



14)



15) $r = 14$ m, $\theta = 210^\circ$

16) $r = 12$ m, $\theta = 150^\circ$