Geometry Name_____ ID: 1

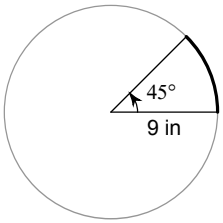
© 2016 Kuta Software LLC. All rights reserved.

Arc Length and Sector Area

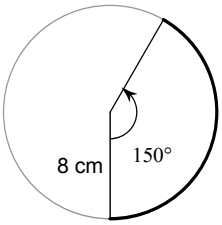
Date_____ Period____

Find the length of each arc.

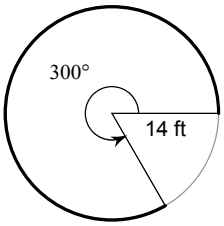
1)



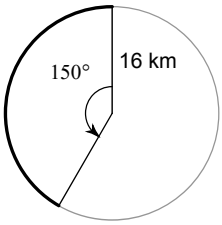
2)



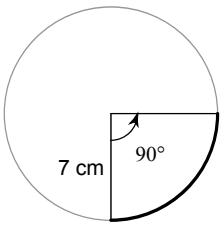
3)



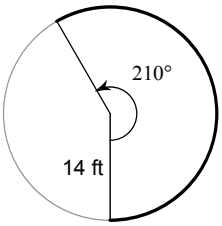
4)



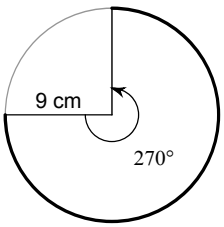
5)



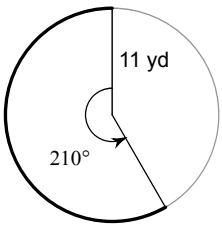
6)



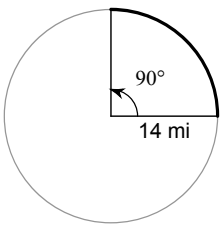
7)



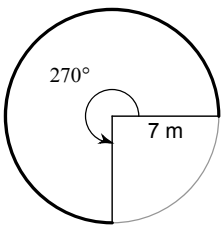
8)



9)



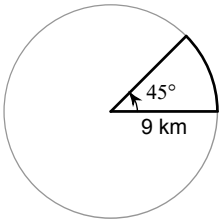
10)



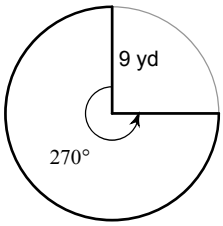
© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.

Find the area of each sector.

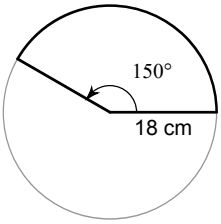
11)



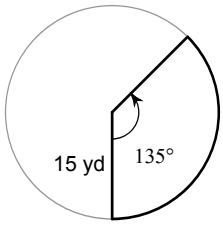
12)



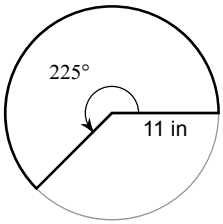
13)



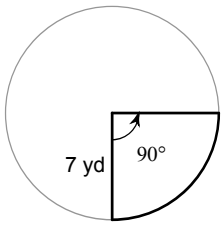
14)



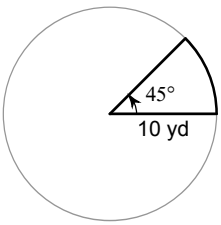
15)



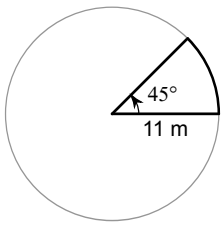
16)



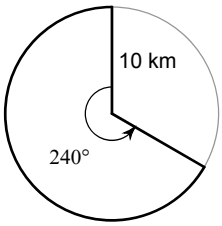
17)



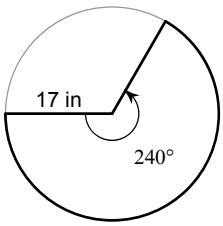
18)



19)



20)



© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.

Answers to Arc Length and Sector Area (ID: 1)

1) $\frac{9\pi}{4}$ in

2) $\frac{20\pi}{3}$ cm

3) $\frac{70\pi}{3}$ ft

4) $\frac{40\pi}{3}$ km

5) $\frac{7\pi}{2}$ cm

6) $\frac{49\pi}{3}$ ft

7) $\frac{27\pi}{2}$ cm

8) $\frac{77\pi}{6}$ yd

9) 7π mi

10) $\frac{21\pi}{2}$ m

11) $\frac{81\pi}{8}$ km²

12) $\frac{243\pi}{4}$ yd²

13) 135π cm²

14) $\frac{675\pi}{8}$ yd²

15) $\frac{605\pi}{8}$ in²

16) $\frac{49\pi}{4}$ yd²

17) $\frac{25\pi}{2}$ yd²

18) $\frac{121\pi}{8}$ m²

19) $\frac{200\pi}{3}$ km²

20) $\frac{578\pi}{3}$ in²

© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.

Geometry Name_____ ID: 2

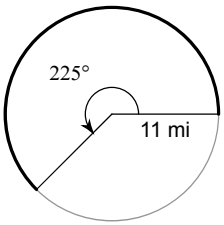
© 2016 Kuta Software LLC. All rights reserved.

Arc Length and Sector Area

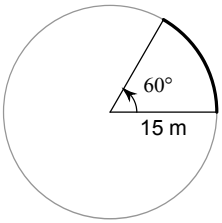
Date_____ Period____

Find the length of each arc.

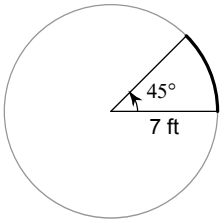
1)



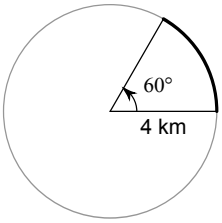
2)



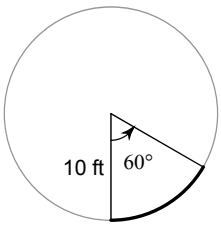
3)



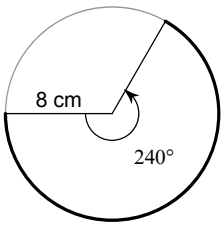
4)



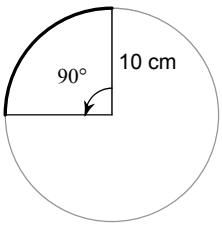
5)



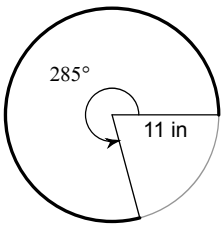
6)



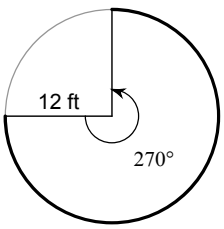
7)



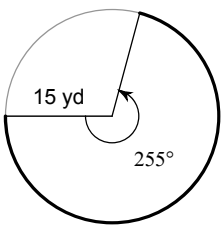
8)



9)



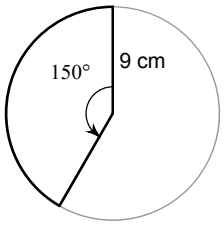
10)



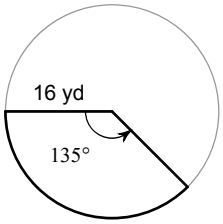
© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.

Find the area of each sector.

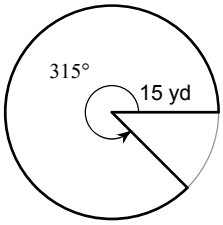
11)



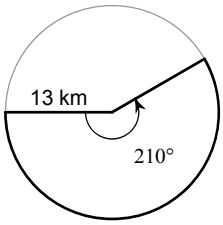
12)



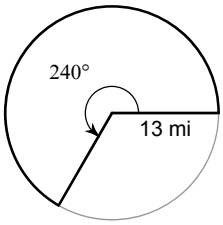
13)



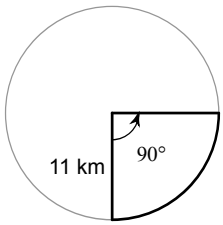
14)



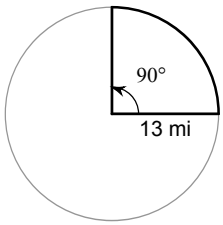
15)



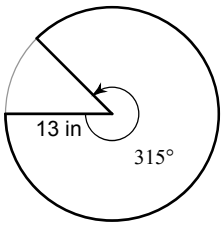
16)



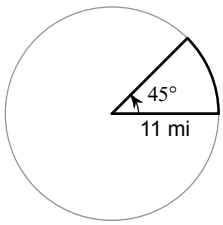
17)



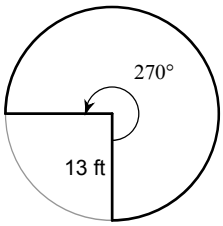
18)



19)



20)



© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.

Answers to Arc Length and Sector Area (ID: 2)

1) $\frac{55\pi}{4}$ mi

2) 5π m

3) $\frac{7\pi}{4}$ ft

4) $\frac{4\pi}{3}$ km

5) $\frac{10\pi}{3}$ ft

6) $\frac{32\pi}{3}$ cm

7) 5π cm

8) $\frac{209\pi}{12}$ in

9) 18π ft

10) $\frac{85\pi}{4}$ yd

11) $\frac{135\pi}{4}$ cm²

12) 96π yd²

13) $\frac{1575\pi}{8}$ yd²

14) $\frac{1183\pi}{12}$ km²

15) $\frac{338\pi}{3}$ mi²

16) $\frac{121\pi}{4}$ km²

17) $\frac{169\pi}{4}$ mi²

18) $\frac{1183\pi}{8}$ in²

19) $\frac{121\pi}{8}$ mi²

20) $\frac{507\pi}{4}$ ft²

© 2016 Kuta Software LLC. All rights reserved. Made with Infinite Geometry.