Geometry H

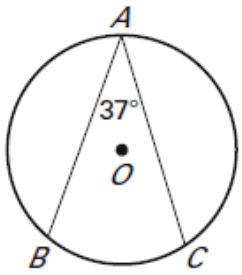
10.4 Homework: Inscribed Angles

Name: _____

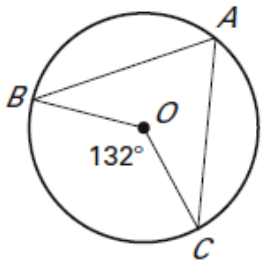
Date: _____ Period: _____

Find the indicated measure.

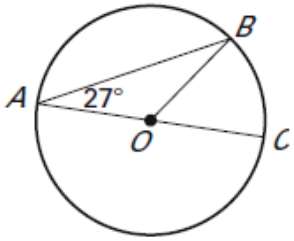
1. $m\overset{\frown}{BC}$



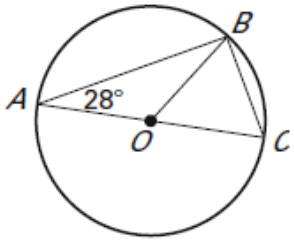
2. $m\angle A$



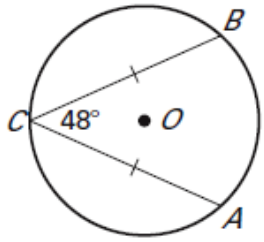
3. $m\overset{\frown}{AB}$



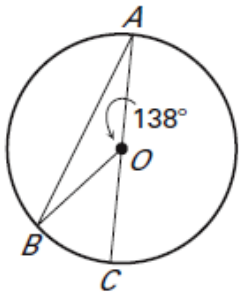
4. $m\angle C$



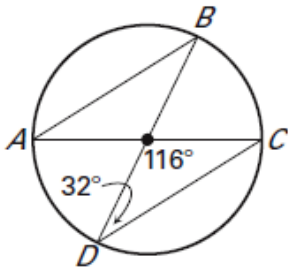
5. $m\overset{\frown}{AC}$



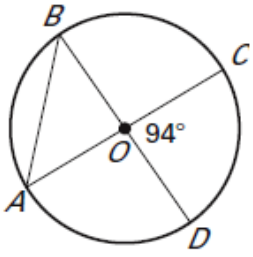
6. $m\overset{\frown}{BC}$



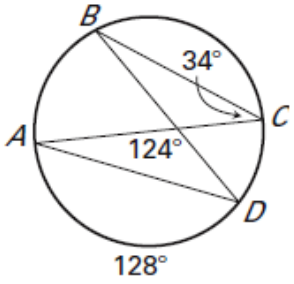
7. $m\angle B$



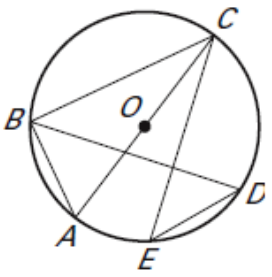
8. $m\angle A$



9. $m\overset{\frown}{BC}$



Find the indicated measure in $\odot O$, given $m\overset{\frown}{CD} = 85°$ and $m\overset{\frown}{BE} = 97°$.



10. $m\angle ABC$

11. $m\angle CED$

12. $m\angle BDE$

13. $m\angle CBD$

14. $m\angle ABD$

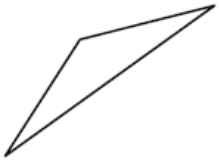
15. $m\angle BCE$

16. $m\overset{\frown}{AD}$

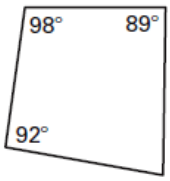
17. $m\overset{\frown}{ABC}$

Determine whether a circle can be circumscribed about the figure.

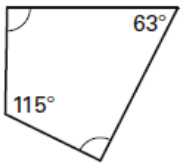
18.



19.

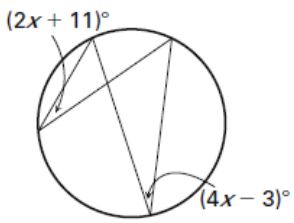


20.

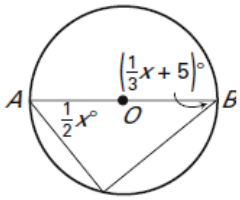


Find the value(s) of the variable(s).

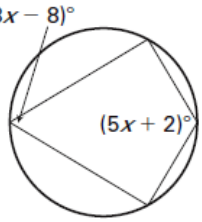
21.



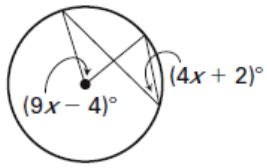
22.



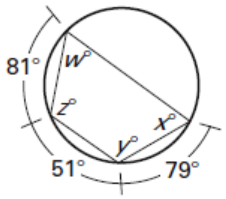
23.



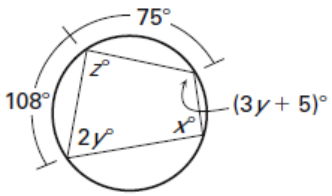
24.



25.



26.

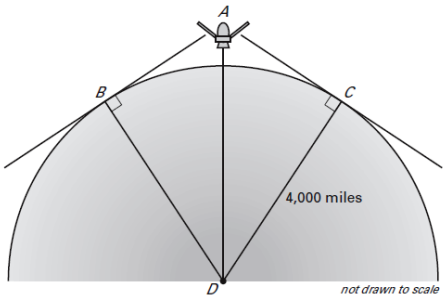


27. The satellite at point *A* is a stationary satellite in the network of a satellite television company. It is hovering 400 miles above Earth. The radius of Earth is approximately 4000 miles.

a) What is the length of $\overline{AD}$?

b) What is measure of $\angle ADC$?

c) What is $m\widehat{BC}$?



Answer Key

1. 74° **2.** 66° **3.** 126° **4.** 62° **5.** 132° **6.** 42°
7. 32° **8.** 43° **9.** 120° **10.** 90° **11.** 42.5°
12. 48.5° **13.** 42.5° **14.** 47.5° **15.** 48.5°
16. 95° **17.** 180° **18.** yes **19.** no **20.** no
21. $x = 7$ **22.** $x = 102$ **23.** $x = 23.25$ **24.** $x = 8$
25. $w = 65, x = 66, y = 115, z = 114$
26. $x = 91.5, y = 35, z = 88.5$
27. a) 4400 miles b) 24.6° c) 49.2°