## 11-3 Arcs and Chords

ALGEBRA Find the value of $\boldsymbol{x}$.
7.


ANSWER:
21
9.


ANSWER:
127
11.


ANSWER:
7
13. $\odot C \cong \odot D$


ANSWER:
27

## 11-3 Arcs and Chords

15. CCSS MODELING Angie is in a jewelry making class at her local arts center. She wants to make a pair of triangular earrings from a metal circle. She knows that $\overparen{A C}$ is $115^{\circ}$. If she wants to cut two equal parts off so that $\overparen{A B}=\widehat{B C}$, what is $x$ ?


ANSWER:
$122.5^{\circ}$
In $\odot A$, the radius is $\mathbf{1 4}$ and $\boldsymbol{C D}=\mathbf{2 2}$. Find each measure. Round to the nearest hundredth, if necessary.

17. $E B$

ANSWER:
5.34

In $\odot H$, the diameter is $18, L M=12$, and $m \overparen{L M}=84$. Find each measure. Round to the nearest hundredth, if necessary.

19. $H P$

ANSWER:
6.71

## 11-3 Arcs and Chords

21. ROADS The curved road at the right is part of $\odot C$, which has a radius of 88 feet. What is $A B$ ? Round to the nearest tenth.


ANSWER:
98.3 ft
23. ALGEBRA In $\odot S, L M=16$ and $P N=4 x$. What is $x$ ?
 ANSWER:
4

