Practice 12-3

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Mixed Exercises

Find the radius and $m\widehat{AB}$.

1.

24 ft
5 ft
A
C
B

2.

C
6 in.
A
B
6 in.
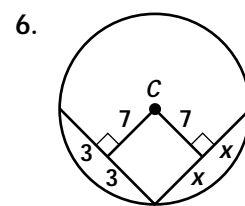
3.

A
2 cm
C
5 cm
B

Find the value of x.

4.

C
x
5
8

5.

x
2
C
3

6.

C
7   7
3   x
3   x

7.

C
12
x
120°

8.

x   C
20
86°

9.

x
6
C
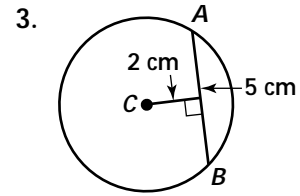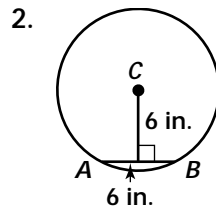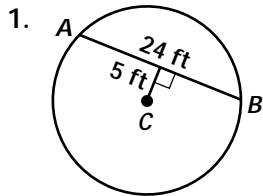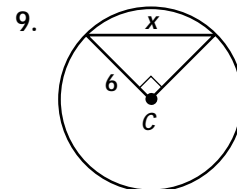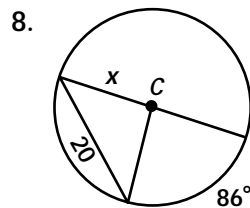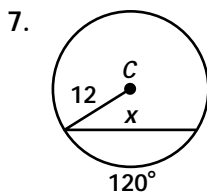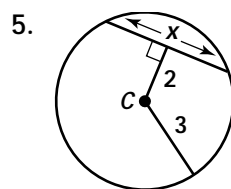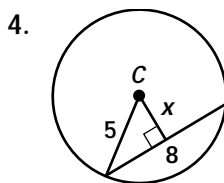
10. Construct the center of the circle.
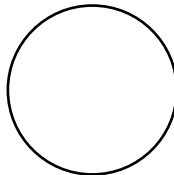
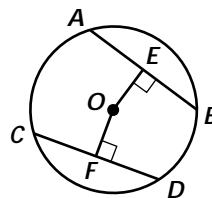**Write a two-column proof, a paragraph proof, or a flow proof.**

11. Prove Theorem 12-9, part (2).

Given: $\odot O$, $\overline{OE} \perp \overline{AB}$, $\overline{OF} \perp \overline{CD}$, $AB = CD$

Prove: $OE = OF$

A
E
O
B
C
F
D

12. Given: $\odot O$ with $m\widehat{AB} = m\widehat{BC} = m\widehat{CA}$

Prove: $m\angle ABC = m\angle BCA = m\angle CAB$

A
O
B
C