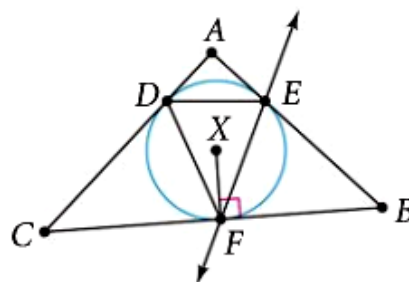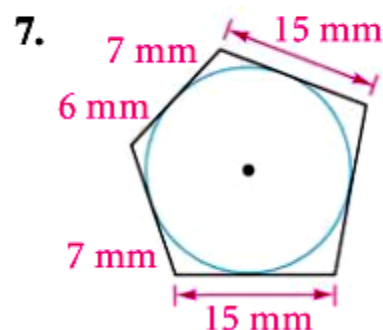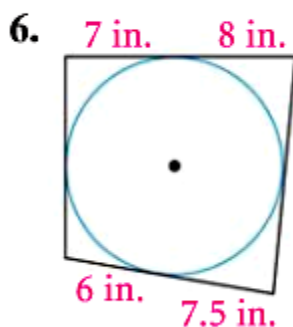**Use the figure to choose the correct term to complete each sentence.**
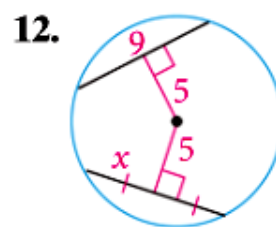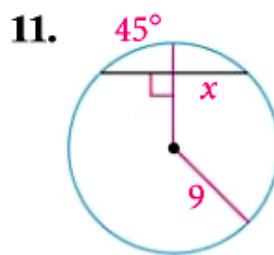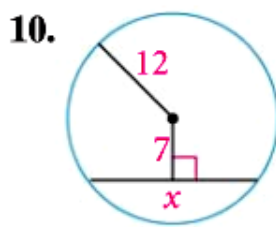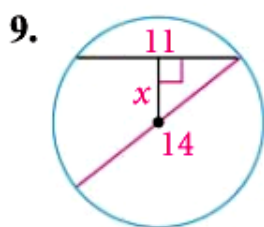
1. $\overline{CB}$ is *(a secant of, tangent to)* $\odot X$.

2. $\overline{DF}$ is a *(chord, locus)* of $\odot X$.

3. $\triangle DEF$ is *(inscribed in, circumscribed about)* $\odot X$.

**4.** $\angle DEF$ is an *(intercepted arc, inscribed angle)* of $\odot X$.

Each polygon circumscribes a circle. Find the perimeter of the polygon.

6.   7 in.   8 in.

6 in.   7.5 in.

7.   7 mm   15 mm

6 mm

7 mm   15 mm

Find the value of x to the nearest tenth.

9.   11   x   14

10.   12   7   x

11.   45°   x   9

12.   9   5   x   5

Assume that lines that appear tangent are tangent. Find the value of each variable.

13.   b°   a°   20°   c°

14.   c°   b°   a°   59°   72°   d°

15.   b°   a°   140°   45°   d°   c°

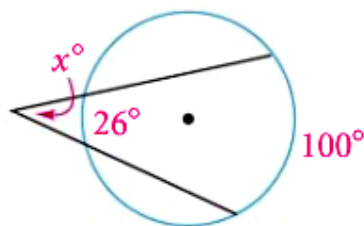**Assume that lines that appear tangent are tangent. Find the value of each variable.**

16. 145°

a° *b*°

45°
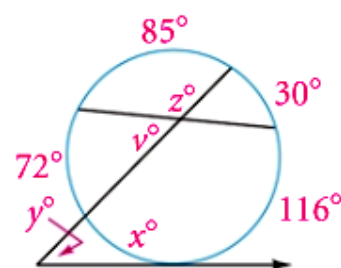
17. *x*°

26°
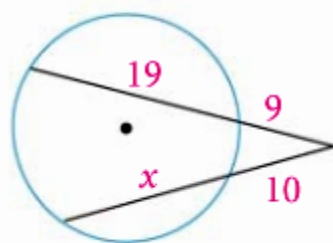
100°
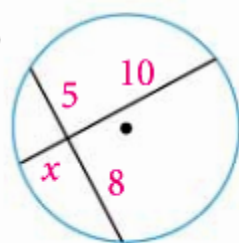
18. 85°

z°

30°

v°

72°

y°

x°

116°
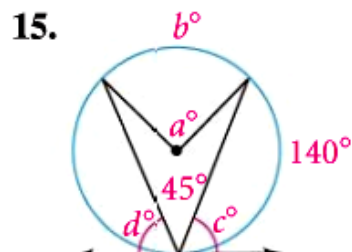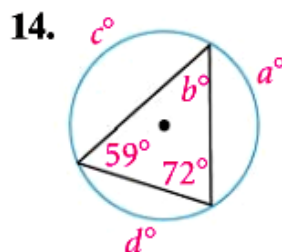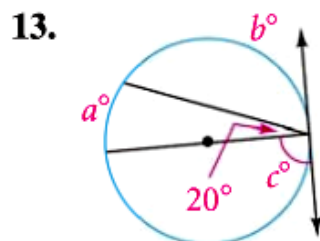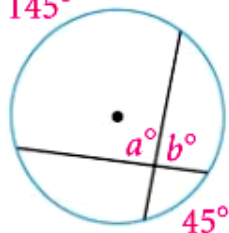
Algebra **Find the value of each variable using the given chords, secants, and tangents. If your answer is not an integer, round to the nearest tenth.**
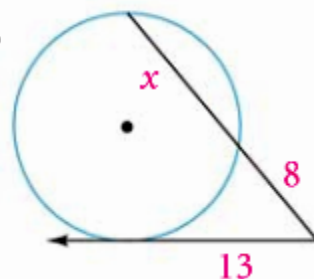
19. 19

9

x

10

20. 10

5

x

8

21. *x*

8

13

Write the standard equation of the circle with center *C* and radius *r*.

22. $C(2, 5); r = 3.5$

23. $C(-3, 1); r = \sqrt{5}$

Describe the circle with the given equation.

29. $(x - 5)^2 + (y + 9)^2 = 40$