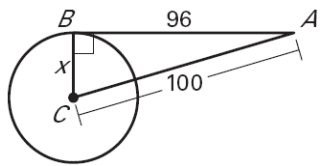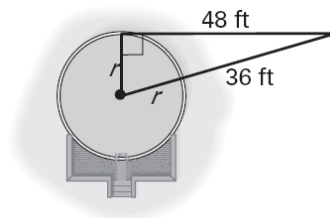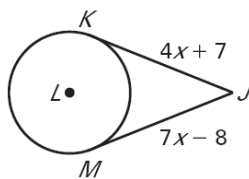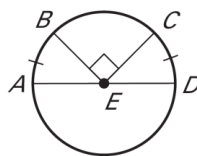1) What is x?

2) Swimming Pool You are standing 36 feet from a circular swimming pool. The distance from you to a point of tangency on the pool is 48 feet as shown. What is the radius of the pool?
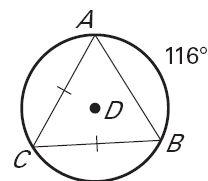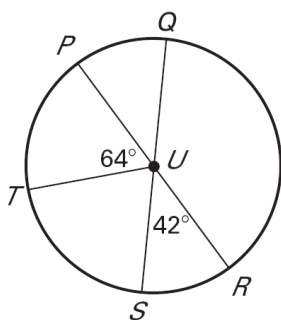

3) Find x.

4) What is $m\widehat{DAB}$?

5) Find $m\widehat{BC}$.

Use $\odot$F for #6-14 to determine whether the given arc is a minor arc, major arc, or semicircle. Then, give the measure of the arc.

6) $m\widehat{PQ}$

7) $m\widehat{ST}$

8) $m\widehat{TPS}$

9) $m\widehat{RT}$

10) $m\widehat{RQS}$

11) $m\widehat{QR}$
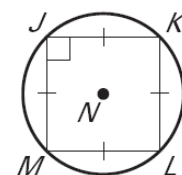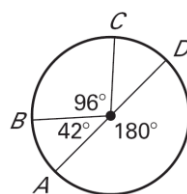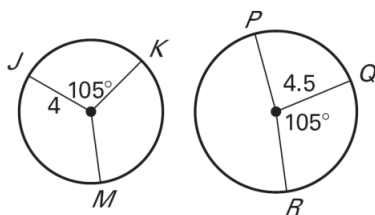
12) $m\widehat{PQS}$

13) $m\widehat{TQR}$

14) $m\widehat{PS}$

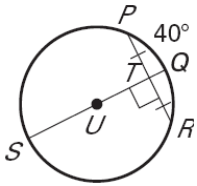In 15 – 16, determine whether the given arcs are congruent.

15) $\widehat{JK}$ and $\widehat{QR}$
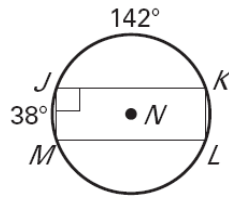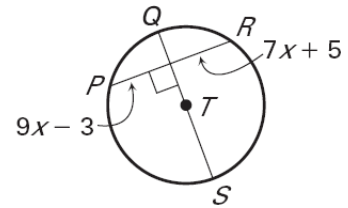
16) $\widehat{AB}$ and $\widehat{CD}$

17) Find $m\widehat{LM}$.

18) Find $m\overgroup{PQR}$.

19) Find $m\overgroup{KLM}$.

142°

38°

20) Find x.

Q   R
7x + 5

P

9x − 3

T

S

21) Find x.
3x − 11

A   B

E

D

x + 9   C

22) Find $m\overgroup{ST}$.

T

S
61°

P

U

23) Find $m\overgroup{AB}$.

B   C

P
20°

A

24) m∠K

J   K

L

M   28°

25) What is x and y?

J

5x°

2y° K

104°

M

110°

L

26) What is x?

F
x°
G

120°

H

184°
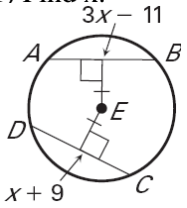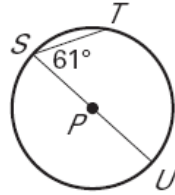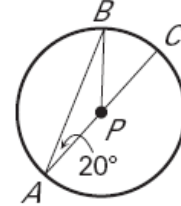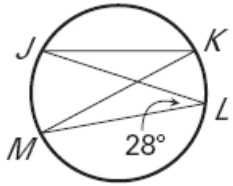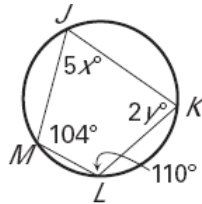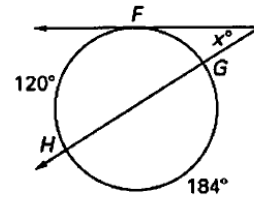
27) If $\overleftrightarrow{WA}$ is tangent to the circle
at point W and $m\overgroup{WVX} = 268°$,
find $m\angle AWX$

W   A

Z

V

X
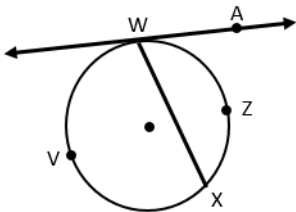
28) If $m\angle AEC = 110°$ and
$m\overgroup{AC} = 75°$, find $m\overgroup{BD}$.

A

E   C

B

D
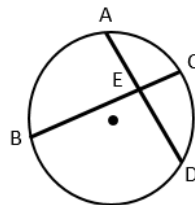
29) If $m\overgroup{PN} = (x^2)°$, $m\overgroup{QR} = (11x)°$
and $m\angle PTN = (9x+4)°$,
find the value of x.

P   N

T

Q   R
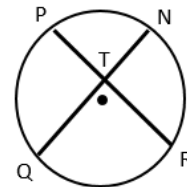
30) Given: Quadrilateral ABCD is inscribed in Circle O.
    Prove: ∠B ≅ ∠ADE

A

B

O

C   D   E