Review of Lessons 9-1 through 9-3 and 9-5

Use the given diagram of circle A to name the following.

1) name two diameters

2) name four radii

3) name four chords

4) name a tangent

5) name a secant

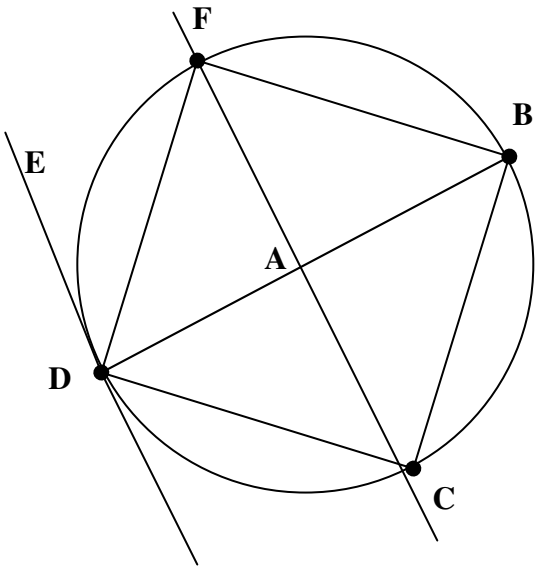
6) name four central angles

7) name four minor arcs

8) name two semi-circles

9) name four major arcs

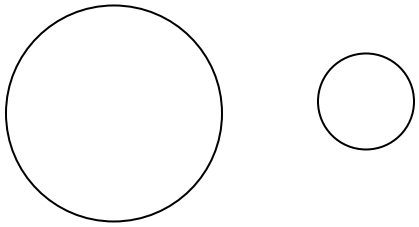
10) name a point of tangency



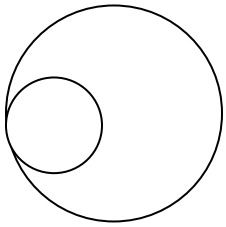
11) Draw a circle with an inscribed isosceles triangle.

Draw in the common tangents for the following.

13)



14)



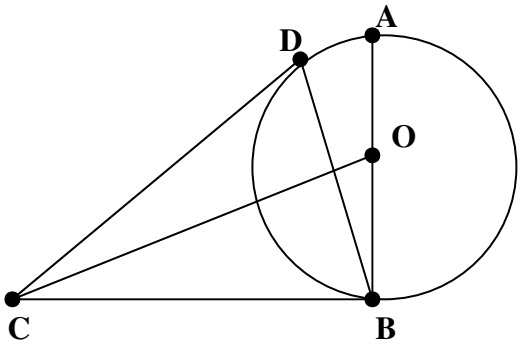
Use the diagram of circle O to find the following.

15) If $OC = 15$ and $OB = 9$ then $BC =$

16) If $AB = 12$ and $BC = 8$ then $OC =$

18) If $m< BCD = 70°$ then $m< CBD =$

19) If $m< BCD = 50°$ then $m< DBO =$

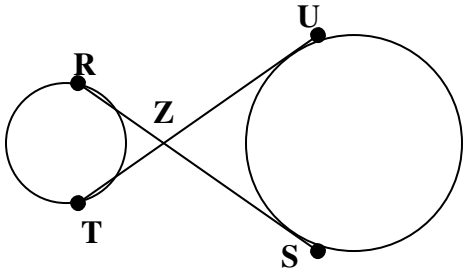


20) At 10:00 the hands of a clock form and angle of _____°

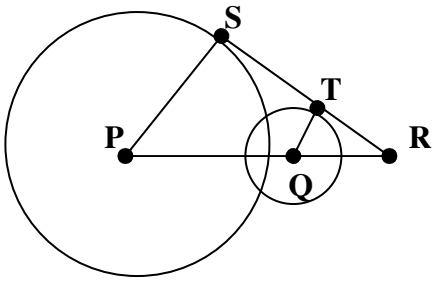
21) If the hands of a clock form an angle of 90°, the time is _____o'clock or _____o'clock.

Solve the following.

22) Find RS and TU if RZ = 4.7 and ZU = 7.3



23) QT = 6; TR = 8; PR = 30 find PQ, PS, and ST



Use the given diagram of concentric circles to classify the following as true or false.

24) $m\overset{\frown}{BC}$ = 45°

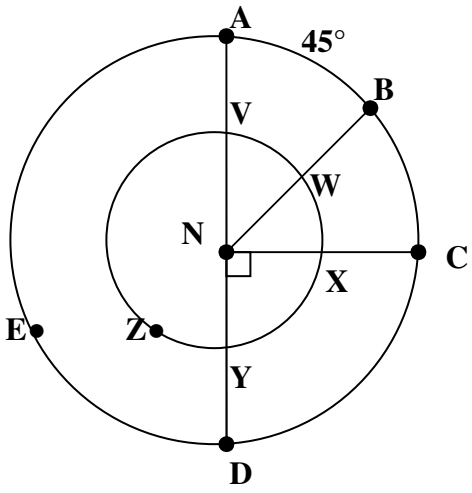
25) $\overset{\frown}{AB} \cong \overset{\frown}{VW}$

26) m< DNC = 90°

27) $m\overset{\frown}{XY}$ = 45°

28) $\overset{\frown}{WX} \cong \overset{\frown}{VW}$

29) $\overset{\frown}{AED} \cong \overset{\frown}{VZY}$

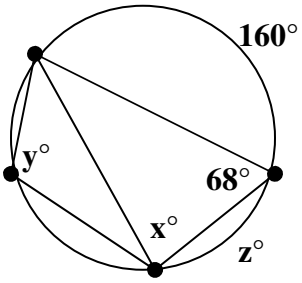


Use the figure above to answer the following.

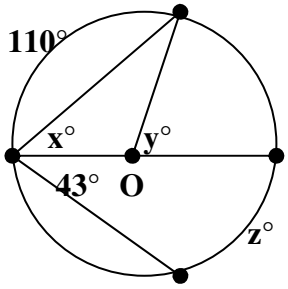
30) find the measure of arc ADC

31) find the measure of arc BAC

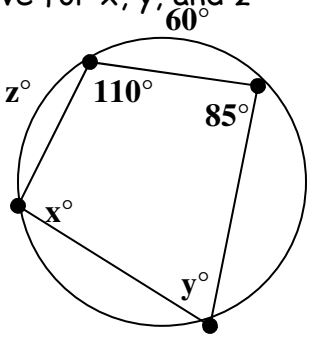
33) solve for x, y, and z



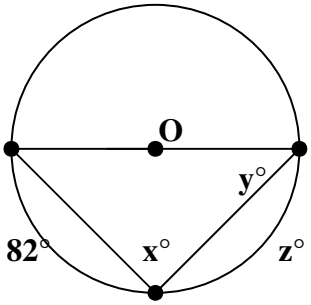
34) solve for x, y, and z



35) solve for x, y, and z



36) solve for x, y, and z



37) measure of arc DE = _____

38) m< EBD = _____

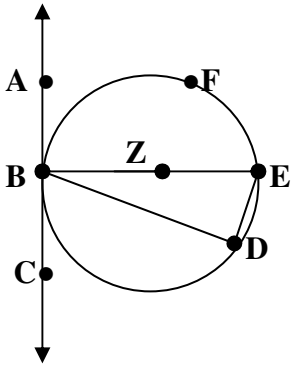
39) measure of arc DB = _____

40) m< DEB = _____

41) m< BDE = _____

42) measure of arc BFE = _____

Given that Z is the center and m< DBC = 75°

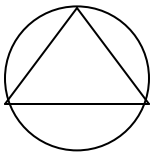


Answer Key:

1) $\overline{CF}$, $\overline{DB}$ 2) $\overline{AB}$, $\overline{AC}$, $\overline{AD}$, and $\overline{AF}$ 3) $\overline{DF}$, $\overline{FB}$, $\overline{BC}$, $\overline{CD}$, $\overline{BD}$, $\overline{FC}$

4) line DE 5) line FC 6) < FAB, < BAC, < CAD, < DAF

7) $\overset{\frown}{FB}$, $\overset{\frown}{BC}$, $\overset{\frown}{CD}$, $\overset{\frown}{DF}$ 8) $\overset{\frown}{FBC}$, $\overset{\frown}{BCD}$ 9) $\overset{\frown}{FBD}$, $\overset{\frown}{BCF}$, $\overset{\frown}{CDB}$, $\overset{\frown}{DFC}$

10) D 11)  13) 2 internal, 2 external

14) one external 15) 12 16) 10 18) 55°

19) 25° 20) 60° 21) 3, 9 22) 12 23) 20, 18, 16

24) true 25) true 26) true 27) false 28) true

29) true 30) 270° 31) 315°

33) 80°, 112°, 64°
34) 35°, 70°, 86°
35) 95°, 70°, 80°
36) 90°, 41°, 98°
37) 30°
38) 15°
39) 150°
40) 75°
41) 90°
42) 180°