SM2 9.7: Interior Angles
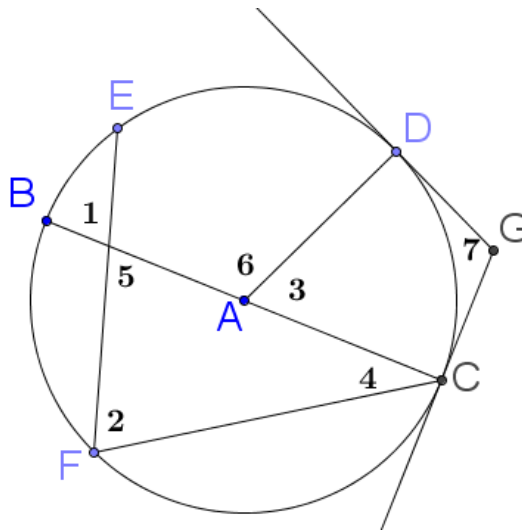

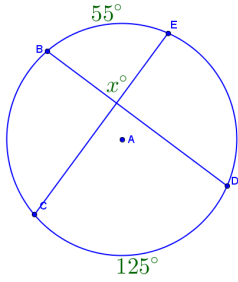Use the figure above to answer questions 1 through 10:
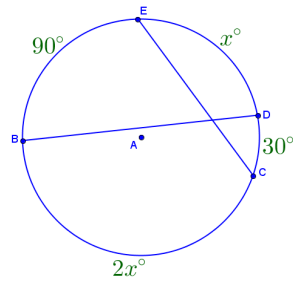
1) What is the name of the circle?

$\odot A$

2) Which marked angles are central angles?

$\angle 3, \angle 6$

3) Which marked angles are inscribed angles?

$\angle 2, \angle 4$

4) Which marked angles are interior angles but not central angles?

$\angle 1, \angle 5$

5) What is the name of each chord of the circle shown in the figure?

$\overline{EF}, \overline{BC}, \overline{CF}$

6) Which marked angles are circumscribed angles?

$\angle 7$

7) Which marked angle pairs must be supplementary?

$\angle 3 \; and \; \angle 6$
$\angle 3 \; and \; \angle 7$

8) Which marked angle intercepts $\overset{\frown}{EC}$?

$\angle 2$

9) Is the arc intercepted by $\angle 4$ minor, major, or semicircular?

minor

10) Is the angle that intercepts $\overset{\frown}{CF}$ a central angle, inscribed angle, cirucmscribed angle or interior angle?

interior

11) Which marked angles are congruent?

$\angle 1 \cong \angle 5$

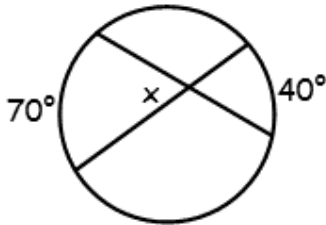12) What is the measure of $\angle ADG$?
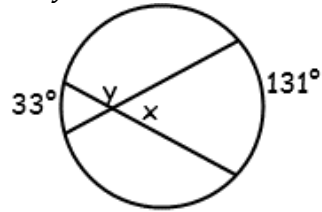
$90°$
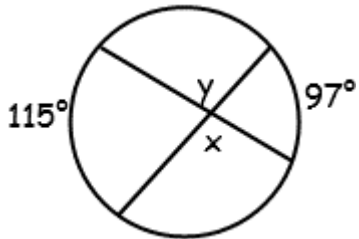
Find the indicated measures.

13) $x = 90°$

55°

$x°$

•A

125°

14) $x = 80°$

90°

$x°$

•D

•A   30°

$2x°$

15) $m\angle x = 55°$

70°   x   40°

16) $m\angle x = 82°$
       $m\angle y = 98°$

33°   y   x   131°

17) $m\angle x = 74°$
     $m\angle y = 74°$

115°   y   97°
        x

18) $x = 53°$
       $m\angle y = 133°$

x   47°   41°
     y

19) $x = 45°$

145°   95°   x

20) $x = 102°$ $y = 40°$

132°

86°

117°

y

x
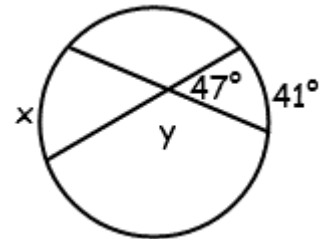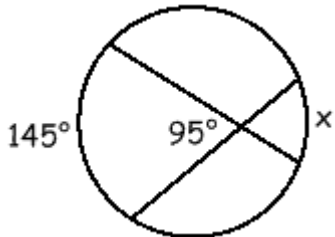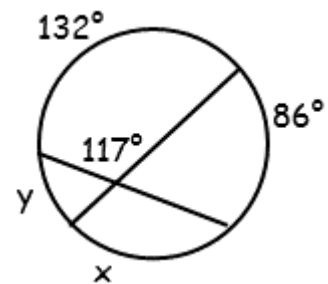
21) $x = 72°$ $y = 94°$
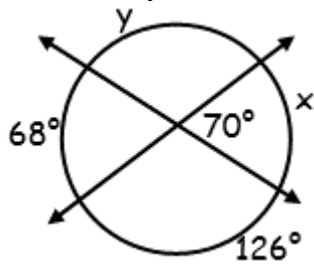
22) $x = 125°$
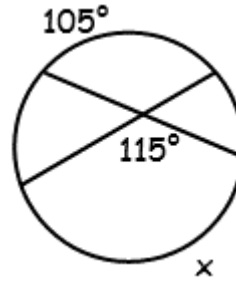
23) $x = 7°$
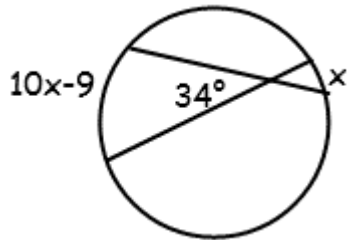
24) $x = 112°$
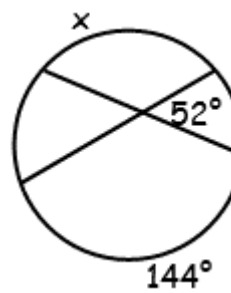
25) $m\angle x = 126°$ $m\angle y = 54°$
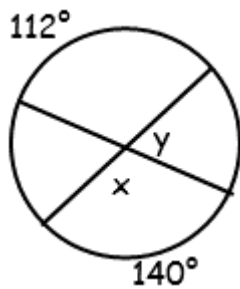
26) $m\angle HEC = 28°$ $m\angle TEH = 34°$
     $m\angle HCE = 90°$ $m\angle CHE = 62°$
     $m\angle TGH = 68°$ $m\angle TGE = 112°$
     $m\angle TCE = 56°$ $m\widehat{TH} = 68°$
     $m\,\widehat{TEH} = 292°$