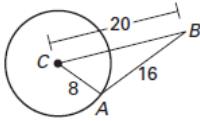Geometry Chapter 10 Review

Name _____
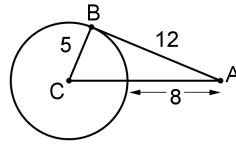
Block _____ Date _____

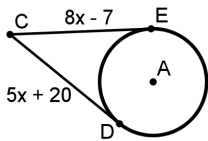1. Is $\overline{AB}$ tangent to $\odot C$? Explain your reasoning.
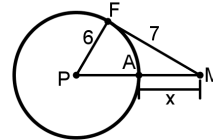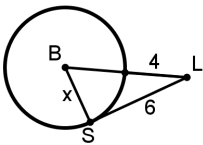   a.

    b.

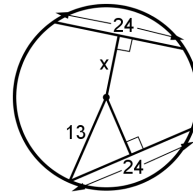
2. E and D are points of tangency. Solve for x.

3. Given that $\overline{FM}$ is tangent solve for x.

4. Given that $\overline{LS}$ is tangent solve for x.
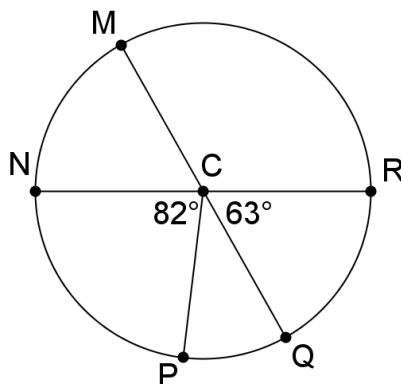

5. Solve for x.

6. Find the indicated measure. $\overline{MQ}$ and $\overline{NR}$ are diameters of $\odot C$ in the image.
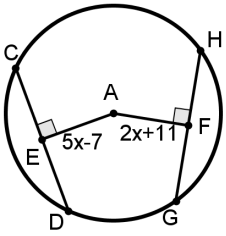
    a. $m\ \overparen{MN} =$ _____

    b. $m\ \overparen{NPR} =$ _____

    c. $m\ \overparen{PQ} =$ _____

    d. $m\ \overparen{MRP} =$ _____

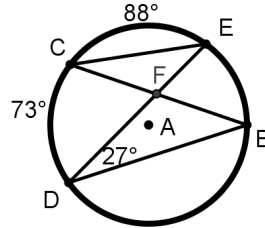7. Solve for x in $\odot A$ given that $\overline{CD} \cong \overline{HG}$.

C
H
A
5x-7   2x+11 F
E
D   G

8. Solve for x in $\odot K$.

23 - x   3x + 3
K
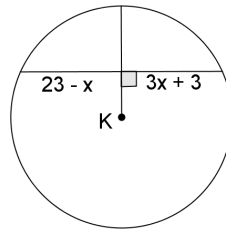
9. Solve for x and y in $\odot P$

$x°$
P 126°
(6y)°
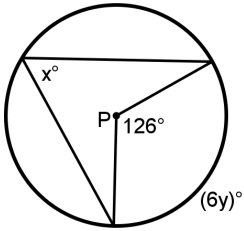
10. Determine the following values:

88°
C   E
F
73°
A
B
27°
D

$m\angle ECB =$ _____ $m\angle CED =$ _____
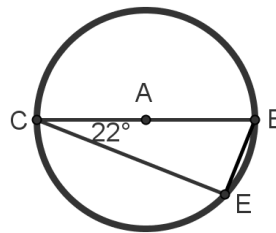
$m\angle CFE =$ _____ $m\ \overgroup{BD}$ _____

11. Which is the most specific name for $\overline{FS}$?

G
F   S
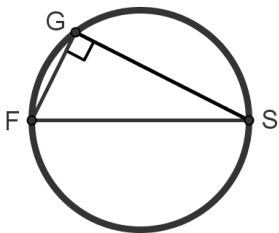
a. Chord
b. Secant
c. Diameter
d. Tangent

Explain your reasoning:

12. Given $\overline{BC}$ is a diameter solve for $m\ \overgroup{CE}$

A
C   B
22°
E

13. Solve for x in the diagram.

C
77°
69° B
A
E (4x+7)°
D
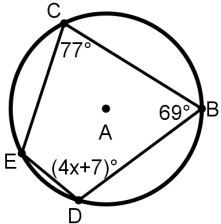
14. Determine the following values:

C   E
F   40°
68°
B
A
D

$m\angle CFE =$ _____ $m\angle BFE =$ _____
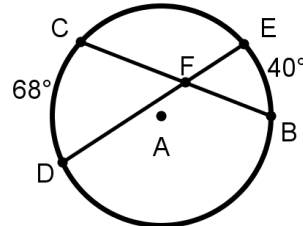
15. Solve for $m\overset{\frown}{BF}$.
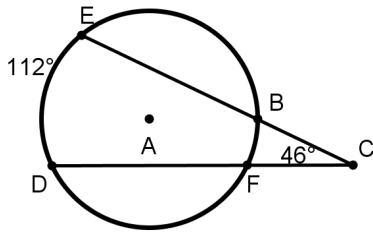
16. Determine the following values:

$m\overset{\frown}{BE} =$ _____ $m\overset{\frown}{DB} =$ _____
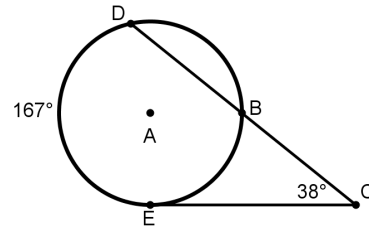
17. Determine the following values:

$m\overset{\frown}{DHE} =$ _____ $m\angle DCE =$ _____
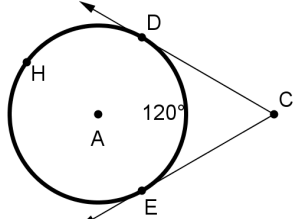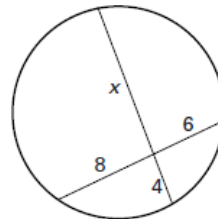
18. Solve for x.

19. Solve for x.
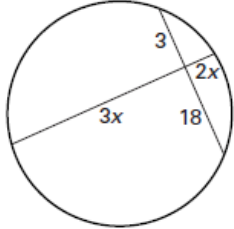
20. Solve for x.

21. Solve for x.

22. Solve for x.

23.   Solve for x.

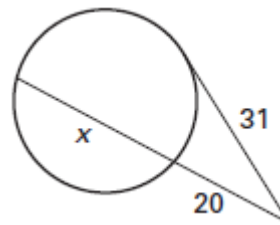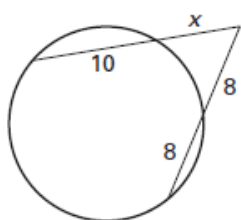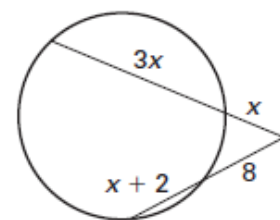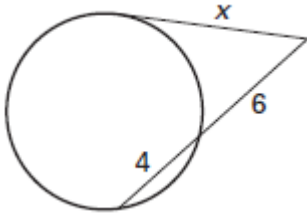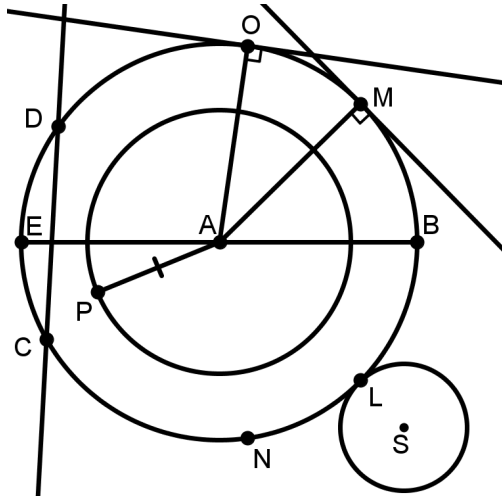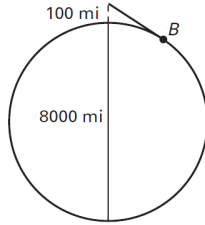24. A satellite is orbiting approximately 100 miles above Earth. The furthest site that the satellite is able to take a photo of Earth is located at tangency point B. If Earth's diameter is approximately 8000 miles, what is the distance from the satellite to point B?

25.   Use proper mathematical notation to name an example of each term from the diagram.

a.   Center   b.   Chord   c.   Diameter

d.   Radius   e.   Point of tangency   f.   Common external tangent

g.   Common internal tangent   h.   Secant Line   i.   Tangent circles

j.   Concentric circles   k.   Congruent circles   l.   Central angle
        (name center and radii)

m.   Minor arc   n.   Major arc   o.   Semicircle

p.   Inscribed angle