Name: _____ Date: _____ Row: _____ Period: _____

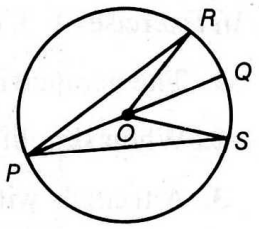
Assignment #: _____

Practice 35

Tangents, Arcs, and Chords

Lessons 9-1 through 9-4

Refer to circle O and complete the following.

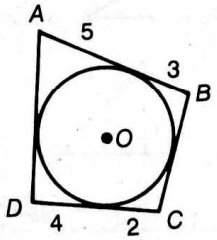


Exs. 1–7

1. If $PQ = 10$, then $OP =$ _____.
2. Three chords shown in the figure are _____, _____, and _____.
3. A line in the plane of $\odot O$ and perpendicular to $\overline{PQ}$ at P is a _____ of $\odot O$.
4. If points E, F, and G lie on $\odot O$, then $\triangle EFG$ is an _____ (inscribed/circumscribed) triangle.
5. If $m\angle ROQ = 28$ and $m\angle QOS = 30$, then $m\overset{\frown}{RS} =$ _____.
6. If $\angle ROQ \cong \angle QOS$, then _____ and _____ are congruent arcs.
7. If $\angle ROP \cong \angle SOP$, then _____ and _____ are congruent chords.

In Exercises 8–10, find the indicated values. O is the center of each circle.

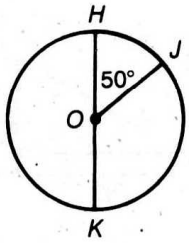
8.



$AD =$ _____

$BC =$ _____

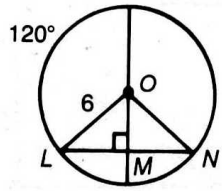
9.



$m\overset{\frown}{JK} =$ _____

$m\overset{\frown}{HKJ} =$ _____

10.



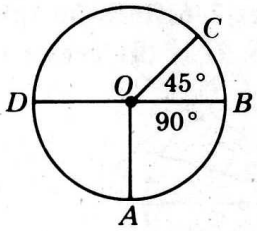
$LM =$ _____

Arcs, Central Angles, and Chords

For use after Section 9–4

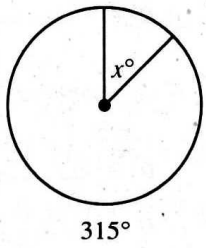
Exercises 1–4 refer to $\odot O$. Find the measure of each arc.

1. $\overset{\frown}{AB}$ _____
2. $\overset{\frown}{CD}$ _____
3. $\overset{\frown}{AC}$ _____
4. $\overset{\frown}{ADC}$ _____



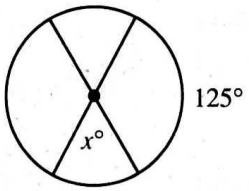
Find the value of x. Each angle shown is a central angle.

5.



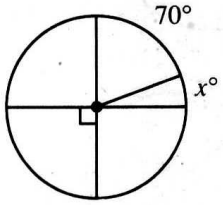
$x =$ _____

6.



$x =$ _____

7.

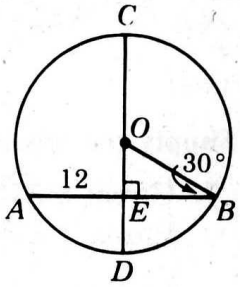


$x =$ _____

8. At ten o'clock the hands of a clock form an angle of _____°.
9. At seven o'clock the hands of a clock form an angle of _____°.
10. If the hands of a clock form an angle of 30°, the time is _____ o'clock.

$\overline{CD}$ is a diameter of $\odot O$. Complete.

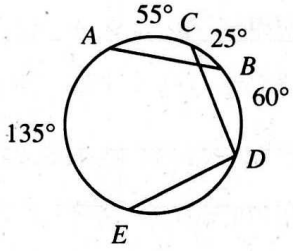
11. $EB =$ _____
12. $OB =$ _____
13. $m\overset{\frown}{DB} =$ _____
14. $m\overset{\frown}{AC} =$ _____
15. $m\overset{\frown}{AB} =$ _____
16. $DE =$ _____



Exs. 11–16

Complete. In Exercises 19 and 20, O is the center of the circle.

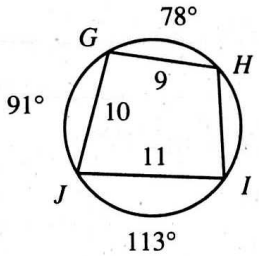
17.



$AB = 8$, $CD = 9$,

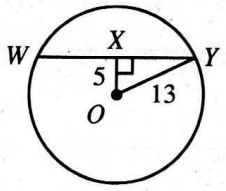
$ED =$ _____

18.



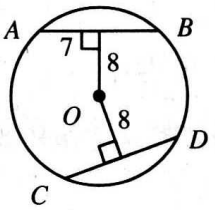
$HI =$ _____

19.



$WY =$ _____

20.



$CD =$ _____