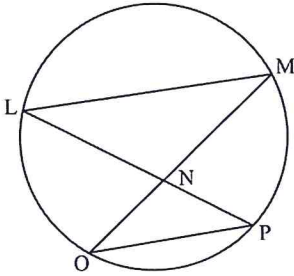


Name \_\_\_\_\_

## Multiple Choice Questions from EOC Released Items

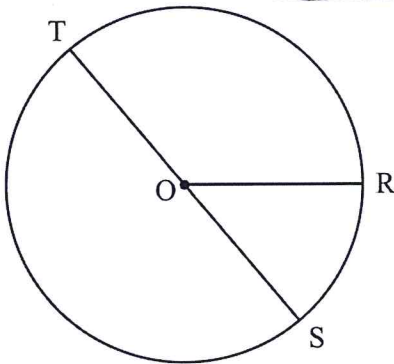
1. In the figure below,  $m\angle MLP = 35^\circ$ . What is  $m\angle MOP$ ? Name its intercepted arc.

What kind of angle is  $\angle MOP$ ?



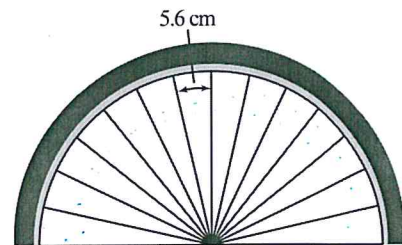
- A.  $35^\circ$     B.  $70^\circ$     C.  $125^\circ$     D.  $145^\circ$

2. In the figure below,  $\overline{TS}$  is a diameter of circle O, and  $m\widehat{RS} = 50^\circ$ . What is  $m\angle TOR$ ? What kind of angle is it?



- A.  $50^\circ$     B.  $65^\circ$     C.  $100^\circ$     D.  $130^\circ$

3. A wheel is being made with spokes as shown in the figure below. The spokes meet at the center of the wheel and will be separated so that there is 5.6 cm along the curved part of the wheel between any two of a spoke. What is the central angle between any consecutive spokes. Round your answer to the nearest degree.

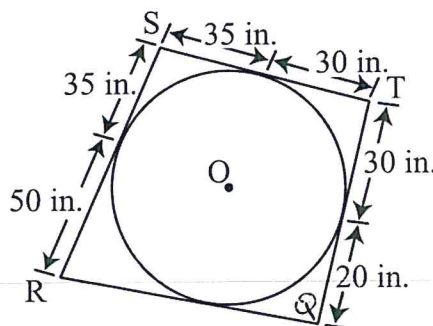


ends  
two

- A.  $13^\circ$     B.  $14^\circ$     C.  $26^\circ$     D.  $28^\circ$

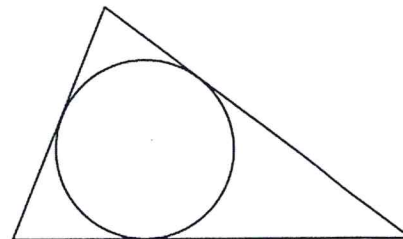
4. Circle O is inscribed in the quadrilateral. Find the length of  $\overline{RQ}$ .

- A. 50 in.  
B. 65 in.  
C. 70 in.  
D. 85 in.



5. Phil created a design with a circle inscribed in a triangle. What is the relationship between any one side of the triangle and the circle?
- The side is a radius of the circle.
  - The side is a chord of the circle.
  - The side is a tangent of the circle.
  - The side is a secant of the circle.

6. What is the relationship between the triangle and the circle in the figure below?

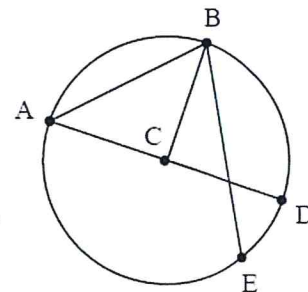


- The circle is inscribed in the triangle.
- The triangle is inscribed in the circle.
- The circle is concentric with the triangle.
- The circle is circumscribed about the triangle.

7. If point C is the center of the circle, which segment is **not** a chord of the circle?

- $\overline{AB}$
- $\overline{CB}$
- $\overline{BE}$
- $\overline{AD}$

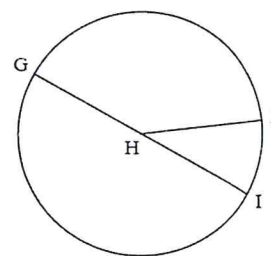
If  $\overline{BE}$  is part of a line, that line is called a secant.  
(Find in handout.)



8. In circle H, the measure of  $\widehat{GJ}$  is 4 times the measure of  $\widehat{IJ}$ .

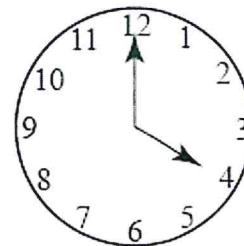
What is the measure of  $\angle GHJ$ ?

- $36^\circ$
- $135^\circ$
- $72^\circ$
- $144^\circ$



9. The minute hand on a clock points directly at 12. The hour hand points directly at 4. What is the measure of the smallest arc determined by the 2 hands?

- $60^\circ$
- $150^\circ$
- $120^\circ$
- $240^\circ$

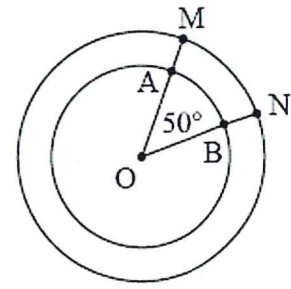


Use the figure below to answer question

10. The two concentric circles shown in the figure above represent tire and rim of a wheel on a wagon. The measure of  $\angle AOB$  is  $50^\circ$ . What is the measure of  $\widehat{MN}$ ?

- A.  $50^\circ$  C.  $100^\circ$   
B.  $150^\circ$  D.  $200^\circ$

What other info would you need to find arc length?

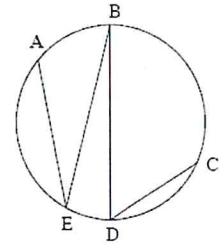


(Not drawn to scale.)

Use the figure below to answer question

11. In the circle above, the measure of  $\angle AEB = 24^\circ$  and the measure of  $\widehat{BC}$  is  $114^\circ$ . What is the measure of  $\widehat{AEC}$ ?

- A.  $48^\circ$  C.  $162^\circ$   
B.  $198^\circ$  D.  $222^\circ$



(Not drawn to scale.)

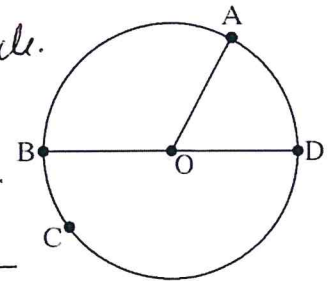
Use the figure below to answer question.

12. Which is a major arc of circle O above?

- A.  $\widehat{AD}$  C.  $\widehat{AOB}$   
B.  $\widehat{BAD}$  D.  $\widehat{BAC}$

Name a semi-circle.

Name a minor arc.



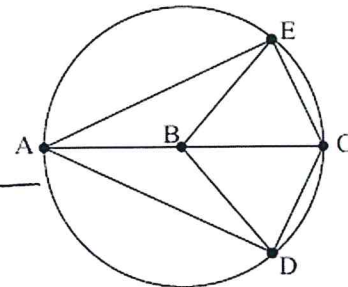
Use the figure below to answer question

13.  $\overline{AC}$  is a diameter of circle B. What is  $m\angle ADC$ ?

- A.  $85^\circ$  C.  $90^\circ$   
B.  $95^\circ$  D.  $100^\circ$

Name two radii:

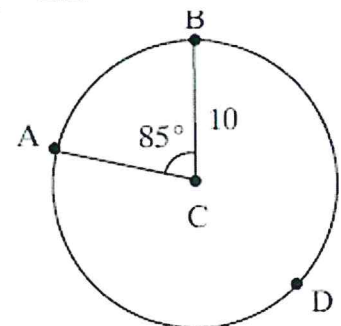
Name a chord:



Use the figure below to answer question

14. Given the circle shown above with center C and  $BC = 10$ , what is the length of  $\widehat{AB}$  to the nearest tenth of a unit?

- A. 12.6 C. 13.5  
B. 14.1 D. 14.8



15. What is the name of a line that intersects a circle in exactly one point?