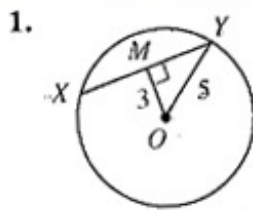
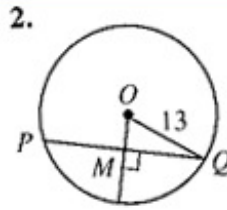


## Section 5.9 Chords and Inscribed Angles

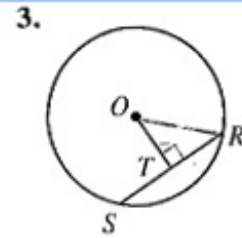
Determine the missing values in the pictures below.



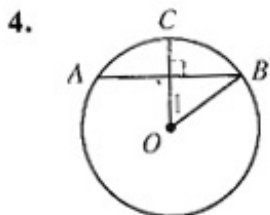
$$XY = \underline{\quad?}$$



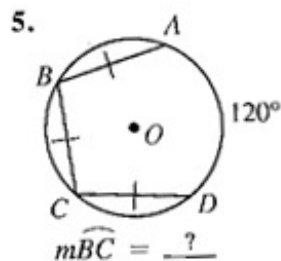
$$PQ = 24; OM = \underline{\quad?}$$



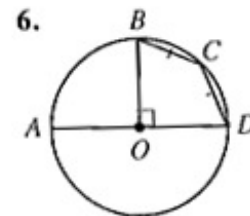
$$OT = 9; RS = 18 \\ OR = \underline{\quad?}$$



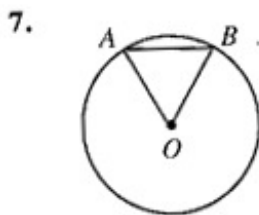
$$m\widehat{ACB} = 110; \\ m\angle 1 = \underline{\quad?}$$



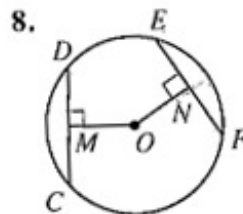
$$m\widehat{BC} = \underline{\quad?}$$



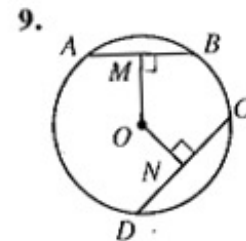
$$m\widehat{CD} = \underline{\quad?}$$



$$m\angle AOB = 60; \\ AB = 24; OA = \underline{\quad?}$$



$$OM = ON = 7; \\ CM = 6; EF = \underline{\quad?}$$



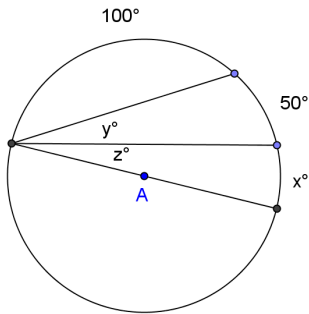
$$AB = 18; OM = 12; \\ ON = 10; CD = \underline{\quad?}$$

10. Sketch a circle with center point P and radius 10 units and a chord XY 8 units long. How far is the chord from the center P?

11. Sketch a circle with center point Q and chord RS that is 16 cm long and 2 cm from the center point. What is the radius of circle Q?

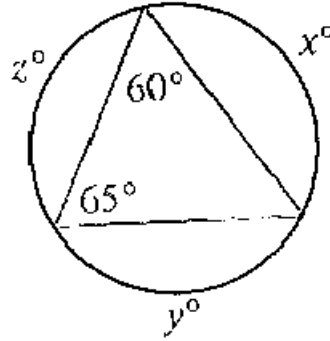
Determine the missing values from the pictures below.

12.



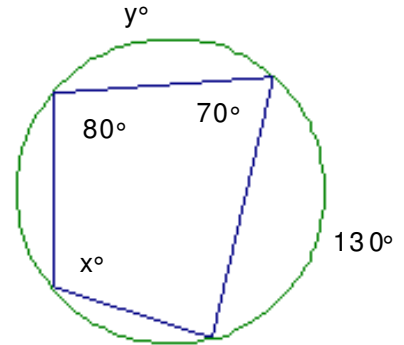
x = \_\_\_\_\_ y = \_\_\_\_\_ z = \_\_\_\_\_  
 15.

13.

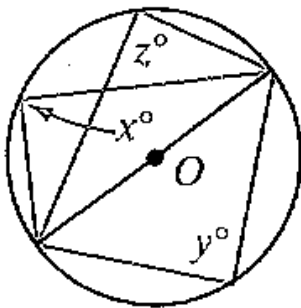


x = \_\_\_\_\_ y = \_\_\_\_\_ z = \_\_\_\_\_  
 16.

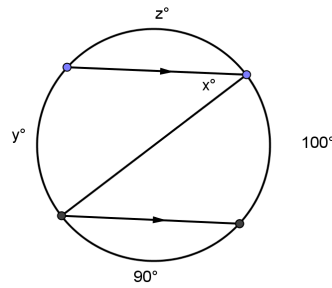
14.



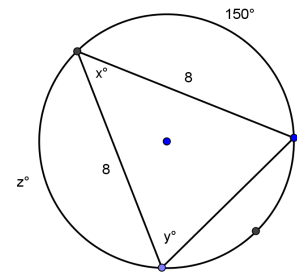
X = \_\_\_\_\_ y = \_\_\_\_\_  
 17.



x = \_\_\_\_\_ y = \_\_\_\_\_ z = \_\_\_\_\_



x = \_\_\_\_\_ y = \_\_\_\_\_ z = \_\_\_\_\_



x = \_\_\_\_\_ y = \_\_\_\_\_ z = \_\_\_\_\_

18. Prove:  $\triangle UZX \sim \triangle YZV$

