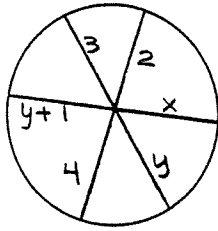


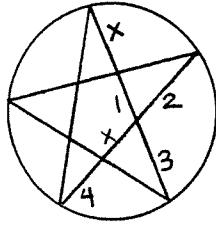
Geometry (H)  
Chapter 9 – Circle review

Name: \_\_\_\_\_

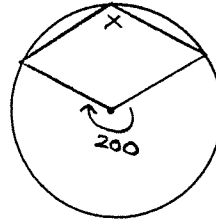
1. Find  $x$  and  $y$ .



2. Find  $x$ .



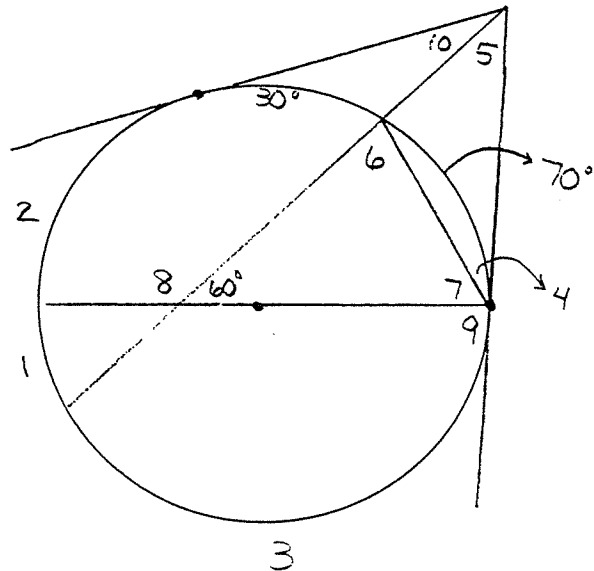
3. Find  $x$ .



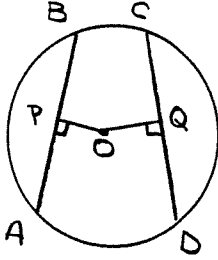
4. Find the distance from the center of the circle to a chord 30 m long if the diameter of the circle is 34 m.

5. Find the measure of all numbered angles and indicated arcs.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_



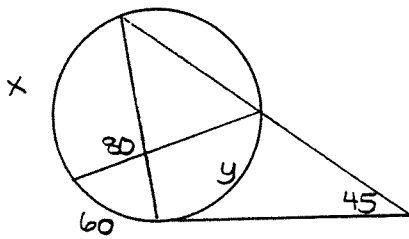
6.  $PB = 3x - 17$ ,  $CD = 15 - x$ ,  $OQ = OP = 3$ . Find AB. Find the radius.



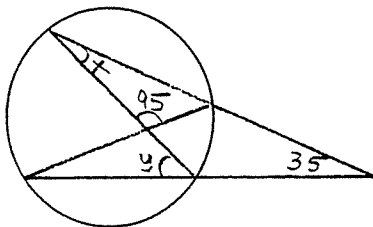
7. Two circles intersect and have a common chord 24 cm long. The centers of the circles are 21 cm apart. The radius of one circle is 13 cm. Find the radius of the other circle.

8. Find x and y.

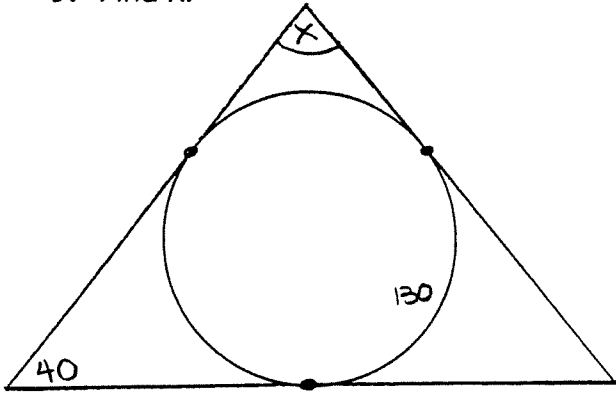
a.



b.



9. Find  $x$ .



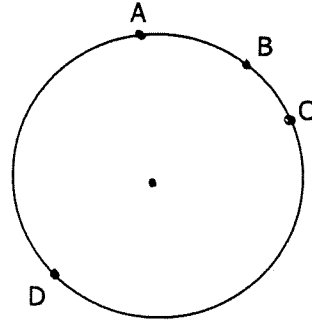
10. In the circle at the right,  $m\widehat{AD} = 3(m\widehat{AB})$ ,  $m\widehat{AC} = 90$ ,  $m\widehat{DC} = 3(m\widehat{BC})$  and  $m\widehat{BCD} = 5(m\widehat{AB})$ . Find each measure.

a.  $m\widehat{AB} =$  \_\_\_\_\_

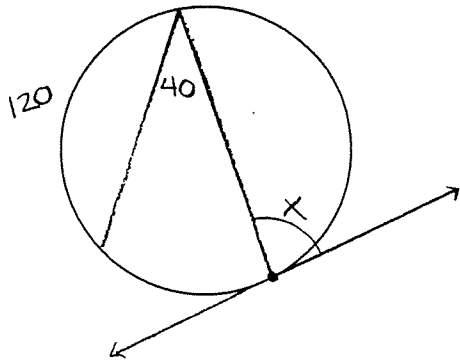
b.  $m\widehat{BC} =$  \_\_\_\_\_

c.  $m\widehat{CD} =$  \_\_\_\_\_

d.  $m\widehat{AD} =$  \_\_\_\_\_



11. Find  $x$ .



12. Find the center and radius of  $x^2 + y^2 - 4x + 10y - 7 = 0$ . Decide if the points  $(2, 1)$ ,  $(6, 0)$ , and  $(-1, -10)$  are on the interior of the circle, exterior of the circle, or on the circle.

13. Graph  $(x + 1)^2 + (y - 3)^2 = 16$ . Decide if each line  $x = -5$ ,  $y = -2$ ,  $x = 7$ , and  $y = -x$  is a secant, tangent, or neither.

14. Write the equation of the line (in slope-intercept form) that contains the center of  $(x + 4)^2 + (y - 1)^2 = 9$  and the point  $(1, -1)$ .

15. Write the equations of all circles that are tangent to the lines  $y = 3$ ,  $y = -5$ , and  $x = 1$ .