

**Geometry**  
**Chapter 9 Review      Part B**

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

Find the indicated measures for the diagram to the right.

1.  $m\widehat{AE}$

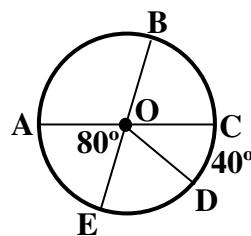
2.  $m\widehat{BC}$

3.  $m\widehat{AEC}$

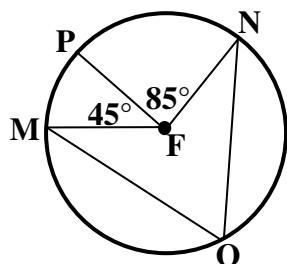
4.  $m\angle AOB$

5.  $m\angle EOD$

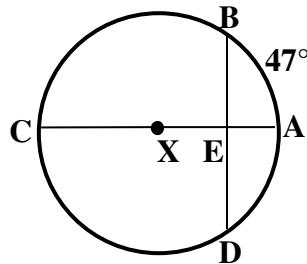
6.  $m\widehat{ABE}$



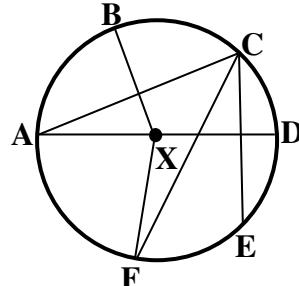
7. Find  $m\angle MON$ .



8.  $\overline{CA} \perp \overline{BD}$ . Find  $m\widehat{BCD}$ .

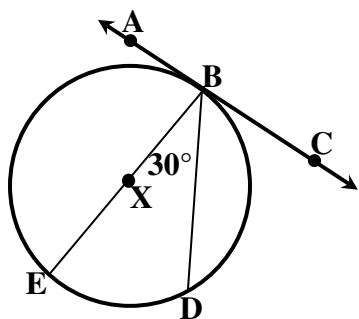


9.  $m\widehat{FD} = 94^\circ$ . Find  $m\angle ACF$ .

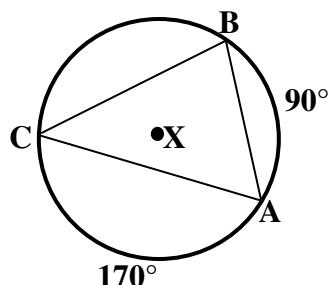


10.  $\overrightarrow{AC}$  is tangent to  $\odot X$ .

Find  $m\widehat{BD}$ .

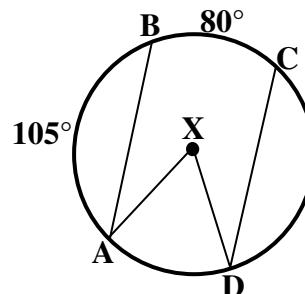


11. Find  $m\angle BAC$ .

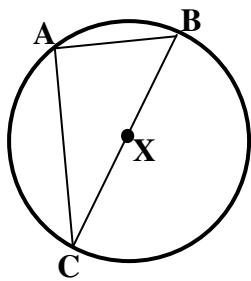


12.  $\overline{AB}$  and  $\overline{CD}$  are equidistant from X.

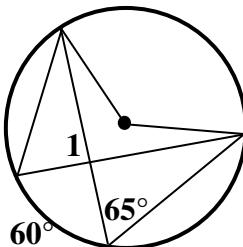
Find  $m\angle AXD$ .



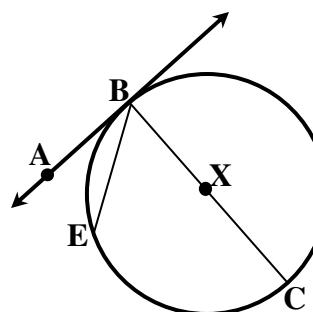
13. In  $\odot X$ ,  $AC = 6$  and  $BC = 2\sqrt{13}$ . Find  $AB$ .



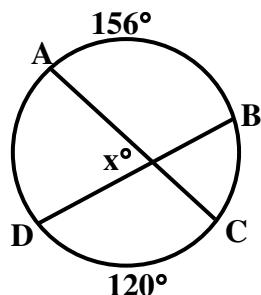
14. Find  $m\angle 1$ .



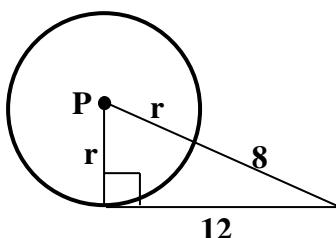
15.  $\overline{BC}$  is a diameter of  $\odot X$ .  $\overleftrightarrow{AB}$  is a tangent to the circle at point B.  $m\widehat{BCE} = 280^\circ$ . Find  $m\angle CBE$ .



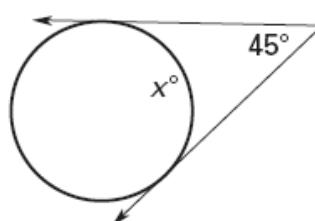
16. Find x.



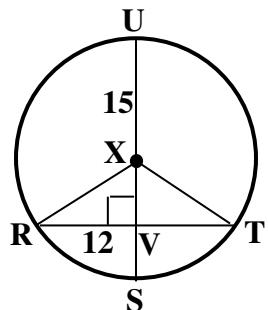
17. Find the value of r.



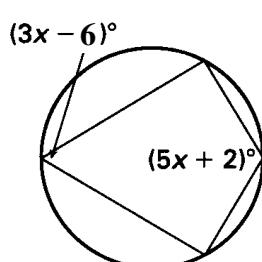
18. Find x.



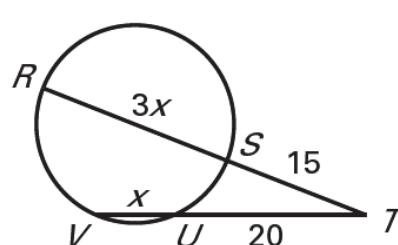
19. Find XV.



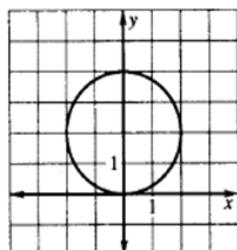
20. Find the value of x.



21. Find x.



22. Write the equation of the circle.



23. The diameter of a circle is 10 inches. If a point is 4 inches from the center, then is it located inside, on, or outside the circle?

24. The point  $(-3, 4)$  lies on a circle whose equation is  $(x + 3)^2 + (y + 1)^2 = r^2$ . What is the diameter of the circle?

### Answer Key:

- |                                |                              |                                |                              |                                |
|--------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|
| 1) $\widehat{AE} = 80^\circ$   | 2) $\widehat{BC} = 80^\circ$ | 3) $\widehat{AEC} = 180^\circ$ | 4) $m\angle AOB = 100^\circ$ | 5) $m\angle EOD = 60^\circ$    |
| 6) $\widehat{ABE} = 280^\circ$ | 7) $m\angle MON = 65^\circ$  | 8) $\widehat{BCD} = 266^\circ$ | 9) $m\angle ACF = 43^\circ$  | 10) $\widehat{BD} = 120^\circ$ |
| 11) $m\angle BAC = 50^\circ$   | 12) $m\angle AXD = 70^\circ$ | 13) $AB = 4$                   | 14) $m\angle 1 = 85^\circ$   | 15) $m\angle CBE = 50^\circ$   |
| 16) $x = 42$                   | 17) $r = 5$                  | 18) $x = 135$                  | 19) $XV = 9$                 | 20) $x = 23$                   |
| 21) $x = 7$                    | 22) $x^2 + (y - 2)^2 = 4$    | 23) Inside                     | 24) $d = 10$                 |                                |