

10.2 Central Angles and Arcs

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

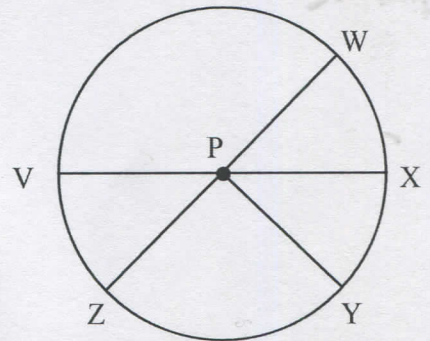
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Minor arc measurements	1 - 4	10, 13, 15	17, 18, 21 - 26, 28
Major arc measurements	5 - 8	11, 12, 14	19, 30, 31
Central angles	1 - 15	16, 20	27, 29
semicircles	1 - 15	19	31

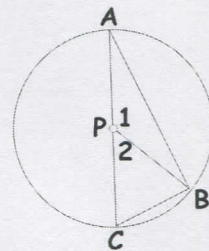
I. In $\odot P$, $m\angle WPX = 38^\circ$, $m\angle ZPY = 95^\circ$. Segments VX and WZ are diameters of the circle. Find the following.

1. $m\widehat{ZY} = 95^\circ$
2. $m\widehat{WX} = 38^\circ$
3. $m\angle VPZ = 38^\circ$
4. $m\widehat{VZ} = 38^\circ$
5. $m\widehat{VWX} = 180^\circ$
6. $m\widehat{ZVW} = 180^\circ$
7. $m\widehat{WYZ} = 180^\circ$
8. $m\widehat{ZXW} = 180^\circ$
9. $m\angle XPY = 47^\circ$
10. $m\widehat{XY} = 47^\circ$
11. $m\widehat{XWY} = 313^\circ$
12. $m\widehat{WZX} = 322^\circ$
13. $m\widehat{VW} = 142^\circ$
14. $m\widehat{VYW} = 218^\circ$
15. $m\widehat{XZ} = 142^\circ$



II. In $\odot P$, $m\angle 1 = 140^\circ$ with diameter \overline{AC} . Find each measure.

16. $m\angle 2 = 40^\circ$
17. $m\widehat{AB} = 140^\circ$
18. $m\widehat{BC} = 40^\circ$
19. $m\widehat{ABC} = 180^\circ$



III. In $\odot P$, $m\angle 2 = m\angle 1$, $m\angle 2 = (4x + 35)^\circ$, $m\angle 1 = (9x + 5)^\circ$ with diameters \overline{BD} and \overline{AC} . Find each of the following.

20. $x = \underline{6}$

26. $m\widehat{AE} = \underline{59^\circ}$

21. $m\widehat{ED} = \underline{59^\circ}$

27. $m\angle 3 = \underline{62^\circ}$

22. $m\widehat{AB} = \underline{62^\circ}$

28. $m\widehat{EC} = \underline{121^\circ}$

23. $m\widehat{EB} = \underline{121^\circ}$

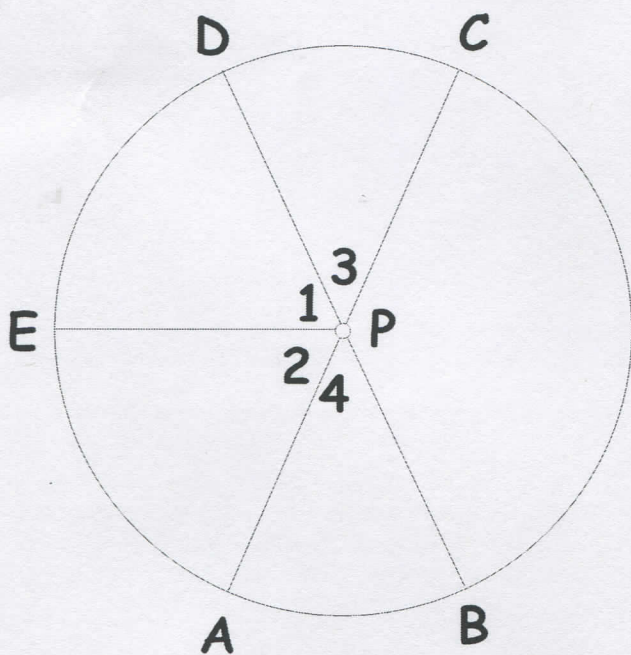
29. $m\angle CPB = \underline{118^\circ}$

24. $m\widehat{CB} = \underline{118^\circ}$

30. $m\widehat{CEB} = \underline{242^\circ}$

25. $m\widehat{DC} = \underline{62^\circ}$

31. $m\widehat{CEA} = \underline{180^\circ}$



CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

●	●	●	●	●	●	●	
1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

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