NAME _____ DATE _____ Pd _____

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

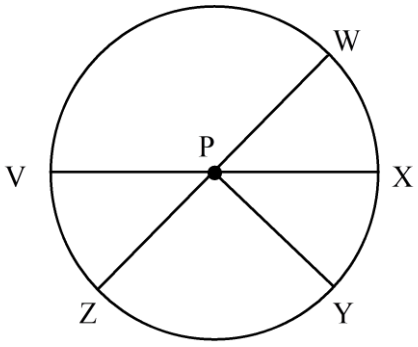
G Use when you completed the problem in a group

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 ⊙P, m∠WPX = 38°, m∠ZPY = 95°. Segments VX and WZ are diameters of the circle. Find the following.



1. m$\widehat{ZY}$ = _____ 6. m$\widehat{ZVW}$ = _____ 11. m$\widehat{XWY}$ = _____

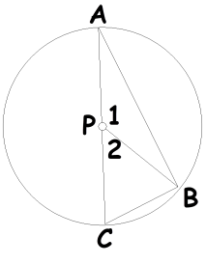
2. m$\widehat{WX}$ = _____ 7. m$\widehat{WYZ}$ = _____ 12. m$\widehat{WZX}$ = _____

3. m∠VPZ = _____ 8. m$\widehat{ZXW}$ = _____ 13. m $\widehat{VW}$ = _____

4. m$\widehat{VZ}$ = _____ 9. m∠XPY = _____ 14. m$\widehat{VYW}$ = _____

5. m$\widehat{VWX}$ = _____ 10. m$\widehat{XY}$ = _____ 15. m $\widehat{XZ}$ = _____

II. In ⊙P, m∠1 = 140° with diameter $\overline{AC}$. Find each measure.



16. m∠2 = _____ 18. m $\overset{\frown}{BC}$ = _____

17. m $\overset{\frown}{AB}$ = _____ 19. m $\overset{\frown}{ABC}$ = _____

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

20. x = _____

21. m $\overset{\frown}{ED}$ = _____

22. m $\overset{\frown}{AB}$ = _____

23. m $\overset{\frown}{EB}$ = _____

24. m $\overset{\frown}{CB}$ = _____

25. m $\overset{\frown}{DC}$ = _____

26. m $\overset{\frown}{AE}$ = _____

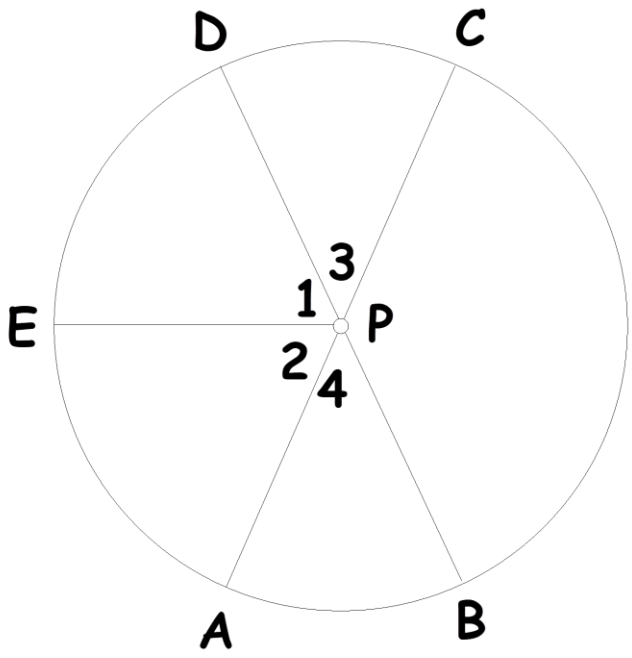
27. m ∠3 = _____

28. m $\overset{\frown}{EC}$ = _____

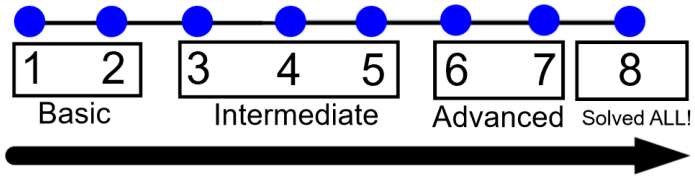
29. m ∠CPB = _____

30. m $\overset{\frown}{CEB}$ = _____

31. m $\overset{\frown}{CEA}$ = _____



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.