NAME __Key__ DATE _____ Pd _____

10.4 Inscribed Angles & Polygons CYU

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Finding angle measures of inscribed polygons		1	5, 6
Inscribed angles		2, 3	
Intercepted arcs		2, 3	
Inscribed Right Triangle Theorem		4	
Inscribed Quadrilateral Theorem		1	5, 6

1. *Find the angle measures of GHJK.*

$m\angle K = 81°$

$m\angle G = 70°$

$m\angle J = 110°$

$m\angle H = 99°$

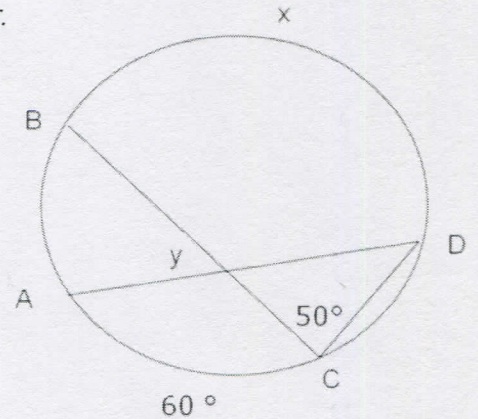$(10b - 69)°$

$(3b + 25)°$ G

K

J $(6b + 20)°$

H
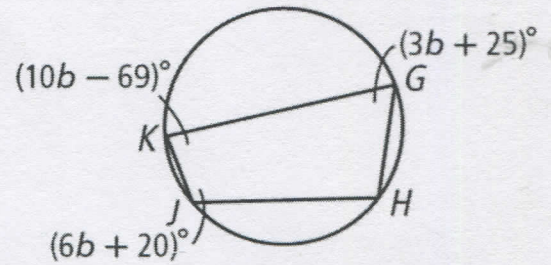
2. *Find the missing pieces of the circle and state the value for each variable.*

$X = 40$

$y = 10$

$Z = 165$

z

x   y

20°   80°

40°

10°

95°
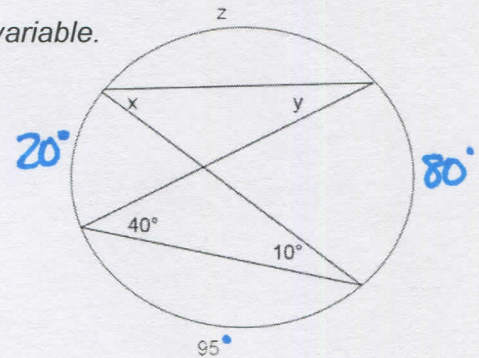
3. *Find x. Then find m∠ADC. Show all work to justify your answer.*

$X = 100°$

$m\angle ADC° = 30°$

x

B

D

y

A

50°

C

60°

4. Find m∠JKL, if $\overline{JK}$ is a diameter.

$m\angle JKL = 40°$

5. Solve for x and y.

$(4y + 13)°$

B

$(25x - 15)°$

C

A

$5(3x + 7)°$

D

$5(y + 1)°$

$x = 4$
$y = 18$

6. Solve for x.

J   K

$(33 + 6x)°$

$\left(\frac{9x}{2}\right)°$ L

$(4x - 13)°$

M
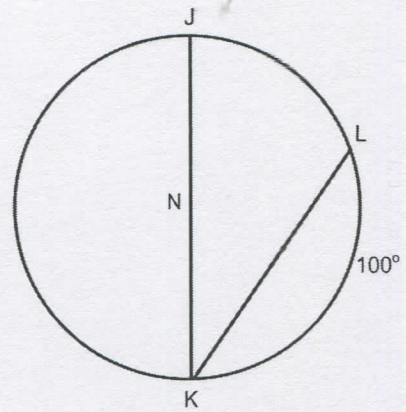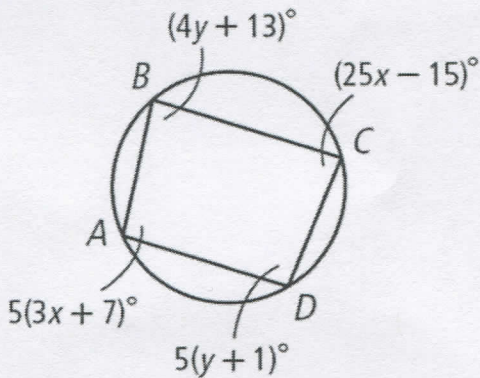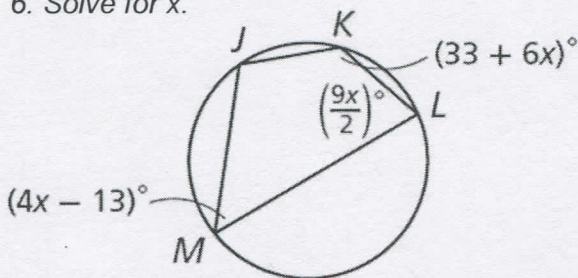
$x = 16$

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!