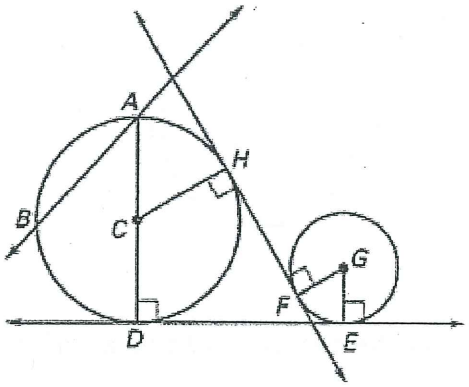
CCGPS ANALYTIC GEOMETRY **Quiz 6.1 – 6.3 Review**

Match the notation with the term that best describes it.

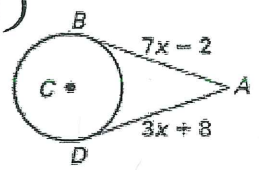
1) D _____
2) $\overleftrightarrow{FH}$ _____
3) $\overline{CD}$ _____
4) $\overline{AB}$ _____
5) C _____
6) $\overline{AD}$ _____
7) $\overleftrightarrow{AB}$ _____
8) $\overleftrightarrow{DE}$ _____

A. Center
B. Chord
C. Diameter
D. Radius
E. Point of tangency
F. Common external tangent
G. Common internal tangent
H. Secant



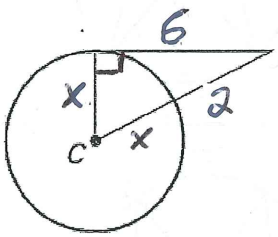
$\overleftrightarrow{AB}$ and $\overleftrightarrow{AD}$ are tangent to ⊙C. Find the value of x.

9)

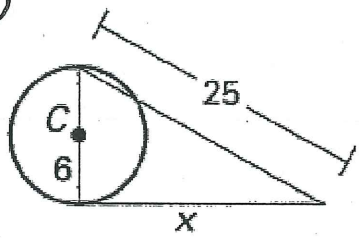


For each ⊙C find the value of x. Assume that segments that appear to be tangent are tangent.

10)

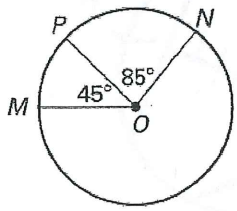


11)

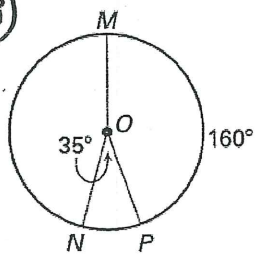


Find the measure of $\widehat{MN}$.

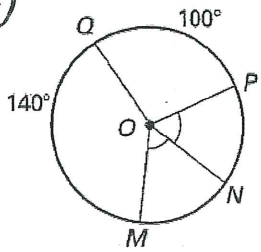
12)



13)

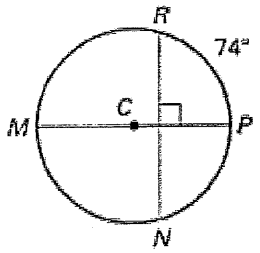


14)

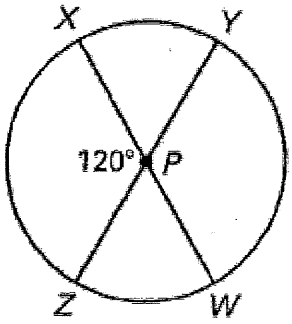


Find the measure of $\widehat{MN}$.

15)



Find the measure of the arc of ⊙ *P*. *(Lesson 10.2)*



16) $\widehat{XY}$

17) $\widehat{ZW}$

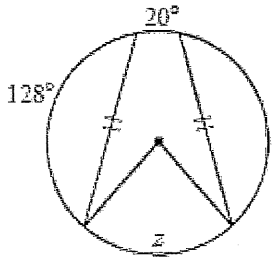
18) $\widehat{XYW}$

19) $\widehat{XYZ}$

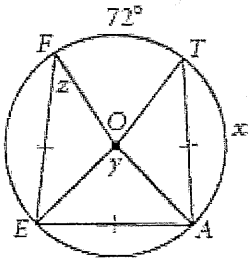
20) $\widehat{YW}$

21) $\widehat{ZYW}$

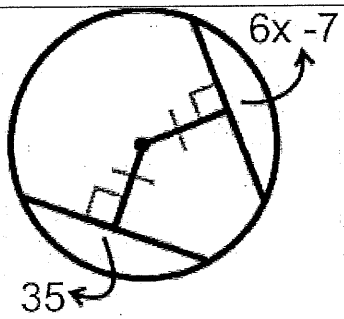
22) Find z



23) Find y and x



24) Find x



Geometry

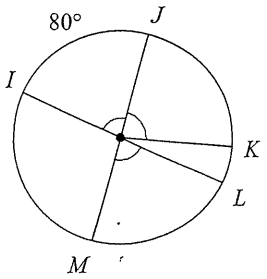
Name_____

Circles quiz review

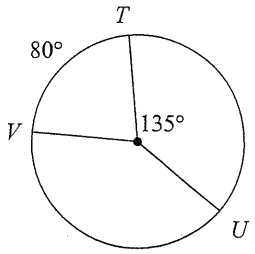
Date_____ Period____

Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

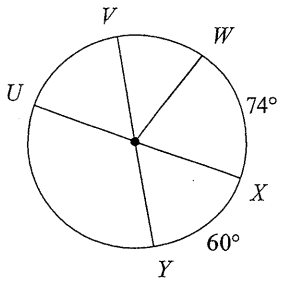
1) $m\widehat{LIK}$



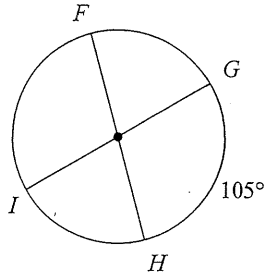
2) $m\widehat{UV}$



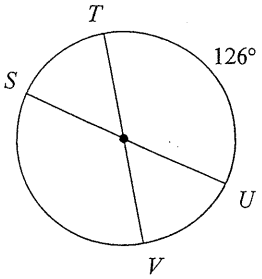
3) $m\widehat{WXU}$



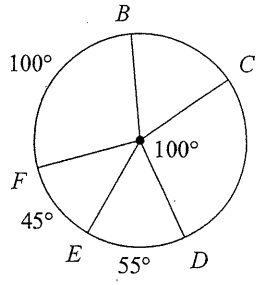
4) $m\widehat{GHF}$



5) $m\widehat{STV}$

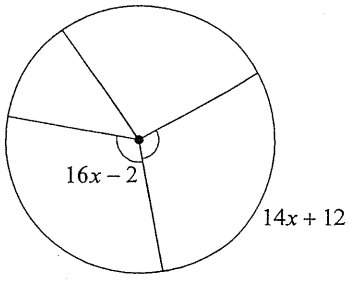


6) $m\widehat{CEB}$

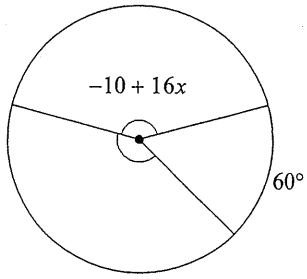


Solve for x. Assume that lines which appear to be diameters are actual diameters.

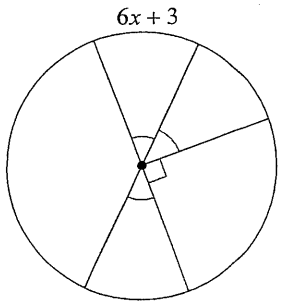
7)



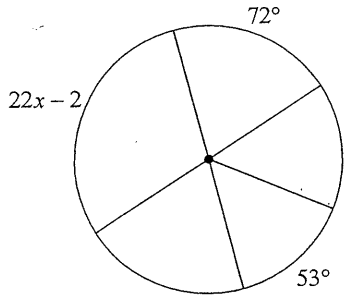
8)



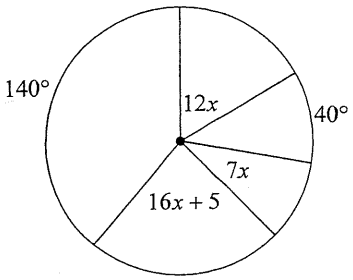
9)



10)

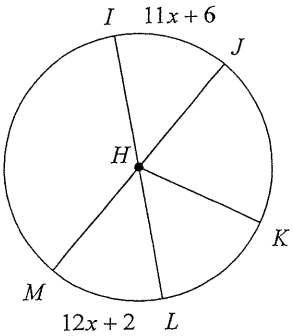


11)

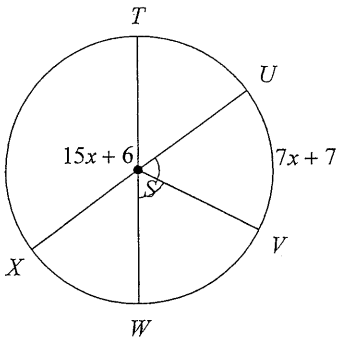


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

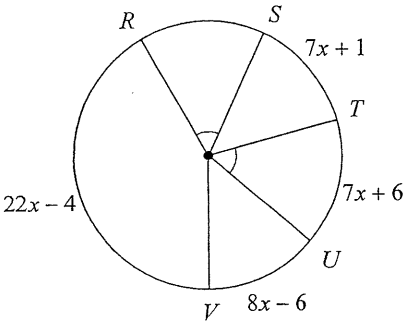
12) $m\angle IHJ$



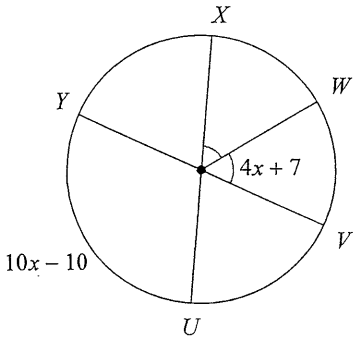
13) $m\angle XST$



14) $m\widehat{ST}$



15) $m\widehat{VU}$

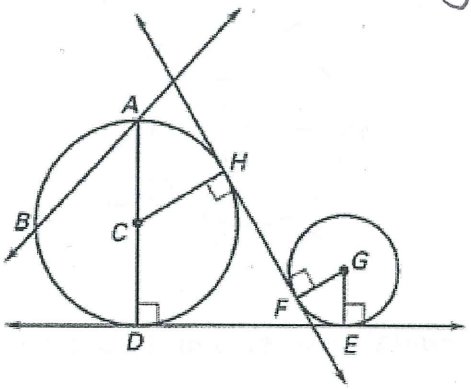


CCGPS ANALYTIC GEOMETRY **Quiz 6.1 – 6.3 Review** Solution Key

Match the notation with the term that best describes it.

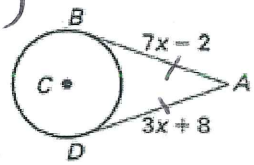
1) D E
2) $\overleftrightarrow{FH}$ G G
3) $\overline{CD}$ D
4) $\overline{AB}$ B
5) C A
6) $\overline{AD}$ C
7) $\overleftrightarrow{AB}$ H
8) $\overleftrightarrow{DE}$ F

A. Center
B. Chord
C. Diameter
D. Radius
E. Point of tangency
F. Common external tangent
G. Common internal tangent
H. Secant



$\overleftrightarrow{AB}$ and $\overleftrightarrow{AD}$ are tangent to ⊙C. Find the value of x.

9)

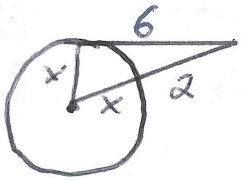


$7x-2=3x+8$

$4x=10$

$x=\frac{10}{4}=\boxed{2.5}$

10)



$x^2+6^2=(x+2)^2$

$x^2+36=(x+2)(x+2)$

$x^2+36=x^2+2x+2x+4$

$\cancel{x^2}+36=\cancel{x^2}+4x+4$

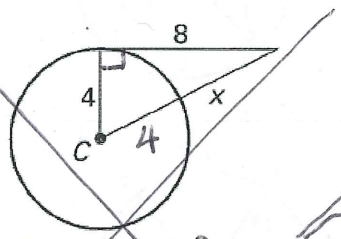
$36=4x+4$

$32=4x$

$\boxed{8=x}$

For each ⊙C find the value of x. Assume that segments that appear to be tangent are tangent.

10)



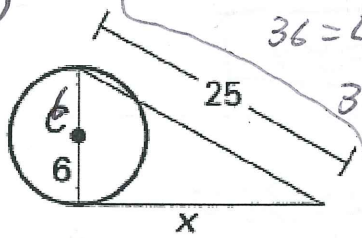
$4^2+8^2=(x+4)^2 \rightarrow (x+4)(x+4)$

$16+64=x^2+4x+4x+16$

$80=x^2+8x+16$

$0=x^2+8x-64$

11)



$x^2+12^2=25^2$

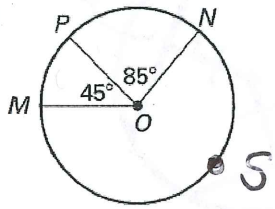
$x^2+144=625$

$x^2=481$

$\boxed{x=21.93}$

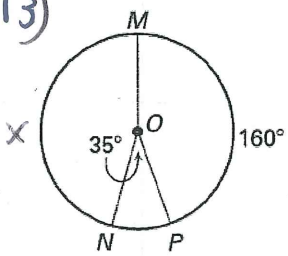
Find the measure of $\widehat{MN}$.

12)



$\widehat{MN}=\boxed{130°}$

13)

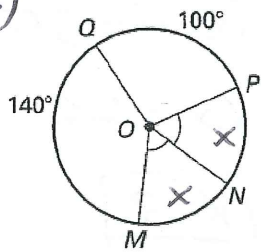


$x+35+160=360$

$\boxed{x=165}$

$\widehat{MN}=165$

14)



$2x+240=360$

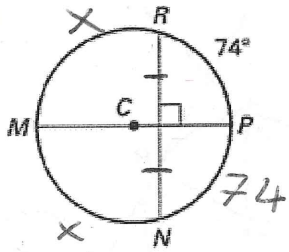
$2x=120$

$x=60$

$\boxed{\widehat{MN}=60°}$

Find the measure of $\widehat{MN}$.

15)



$2x+74+74=360$

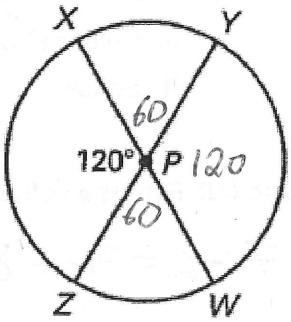
$2x+148=360$

$2x=212$

$x=106$

$\boxed{\widehat{MN}=106^\circ}$

Find the measure of the arc of ⊙ P. *(Lesson 10.2)*



16) $\widehat{XY}$ $=60^\circ$

17) $\widehat{ZW}$ 60°

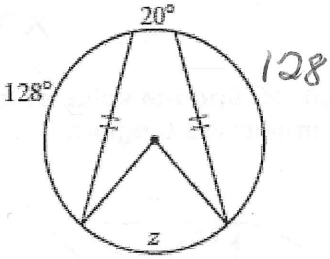
18) $\widehat{XYW}$ 180°

19) $\widehat{XYZ}$ 240°

20) $\widehat{YW}$ 120°

21) $\widehat{ZYW}$ ~~240°~~ 300

22) Find z

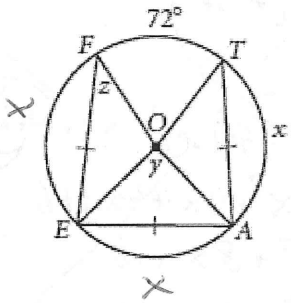


$z+128+128+20=360$

$z+276=360$

$\boxed{z=84^\circ}$

23) Find y and x

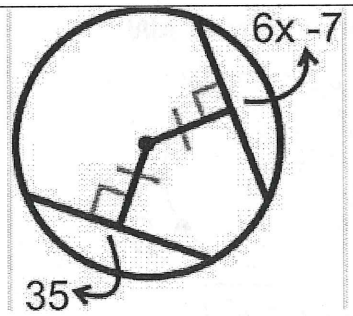


$3x+72=360$

$3x=288$

$\boxed{x=96^\circ}$ $\boxed{y=72^\circ}$

24) Find x



$6x-7=35$

$6x=42$

$\boxed{x=7}$

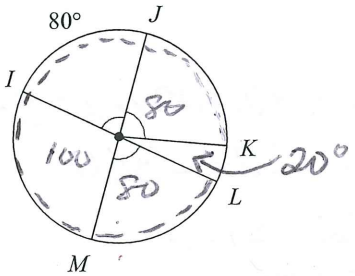
Geometry Name_____

Circles quiz review

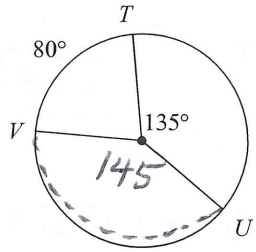
Date_____ Period____

Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

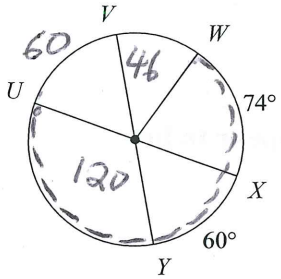
1) $m\widehat{LIK}$ $= 340°$



2) $m\widehat{UV}$ $= 145°$

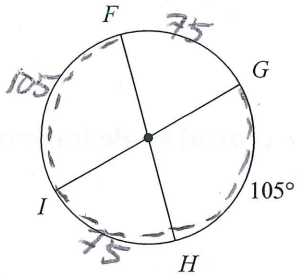


3) $m\widehat{WXU}$ $= 254°$

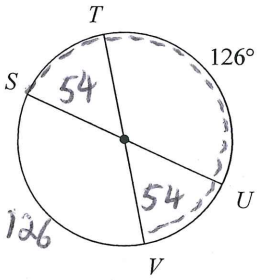


$74+60+120 = \boxed{254°}$

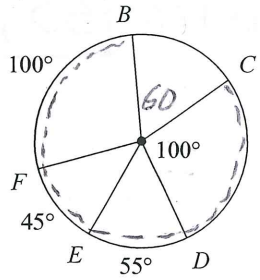
4) $m\widehat{GHF}$ $= 285°$



5) $m\widehat{STV}$ $= 234°$

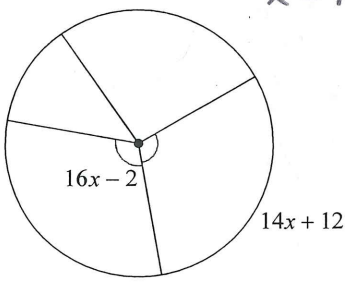


6) $m\widehat{CEB}$ $= 300°$



Solve for *x*. Assume that lines which appear to be diameters are actual diameters.

7) $x = 7$

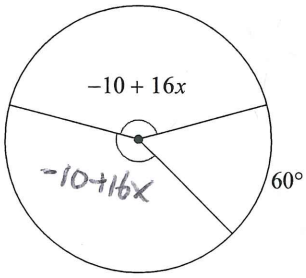


$16x - 2 = 14x + 12$

$2x = 14$

$\boxed{x = 7}$

8) $x = 10$



$-10+16x-10+16x+60=360$

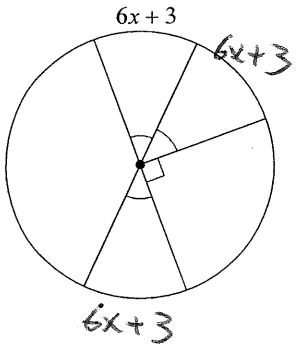
$-20+32x+60=360$

$40+32x=360$

$32x=320$

$\boxed{x=10}$

9) $x=7$



$6x+3+6x+3+90=180$

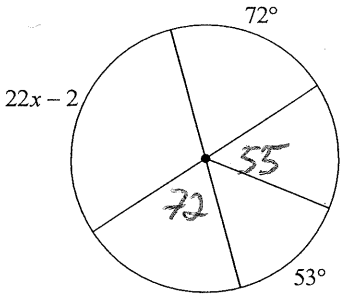
$12x+6+90=180$

$12x+96=180$

$12x=84$

$\boxed{x=7}$

10) $x=5$



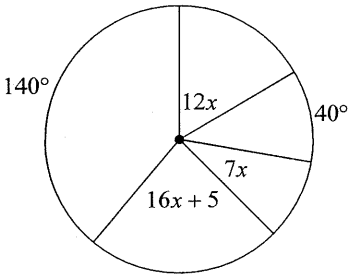
$72+53+55+72+22x-2=360$

$250+22x=360$

$22x=110$

$\boxed{x=5}$

11)



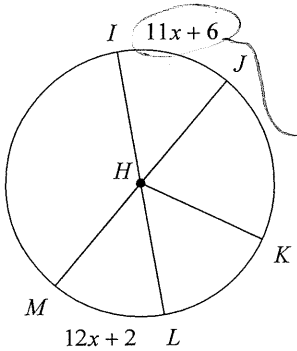
$35x+185=360$

$35x=175$

$\boxed{x=5}$

Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

12) $m\angle IHJ$ $=50°$

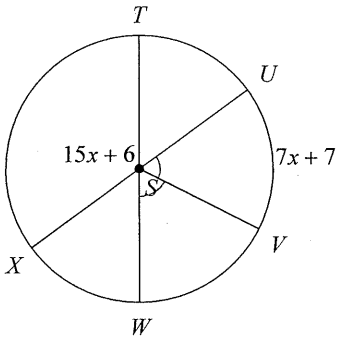


$12x+2=11x+6$

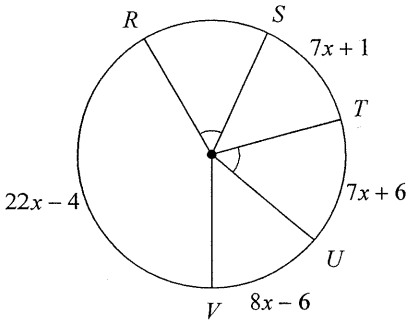
$x=4$

$11(4)+6=\boxed{50°}$

13) $m\angle XST$ $=\boxed{126°}$



14) $m\widehat{ST}$ $=\boxed{50°}$



15) $m\widehat{VU}$ $=\boxed{70°}$