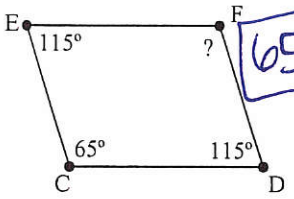
Name Key Hour _____ 12.9 Inscribed Quadrilaterals and Triangles

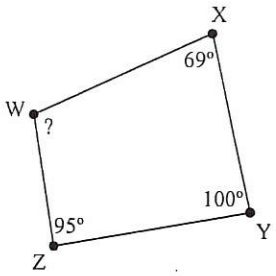
1-2. Find the measure of each indicated angle.

1.



65°

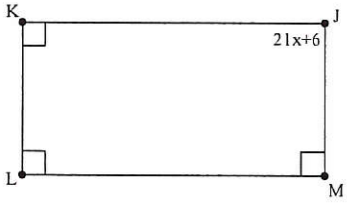
2.



96°

3-4. Solve for x

3.

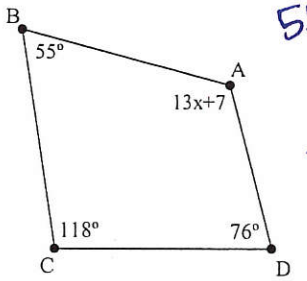


$21x+6=90$

$21x=84$

$x=4$

4.



$55+118+76+13x+7=360$

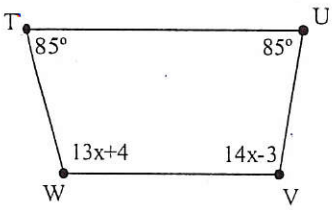
$256+13x=360$

$-256 \quad -256$

$\frac{13x}{13}=\frac{104}{13}$

$x=8$

5. Find the m∠V.

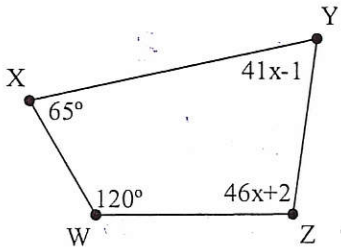


$190=27x+1$

$189=27x$

$7=x$

6. Find the m∠Z.



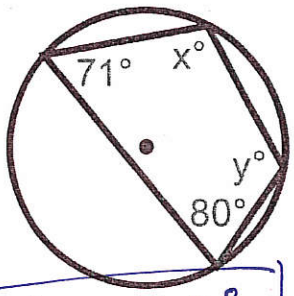
$175=87x+1$

$174=87x$

$x=2$

7-11. Find the measure of x, y and z in the scribed quadrilaterals.

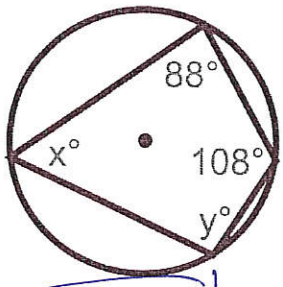
7.



$x=100°$

$y=109°$

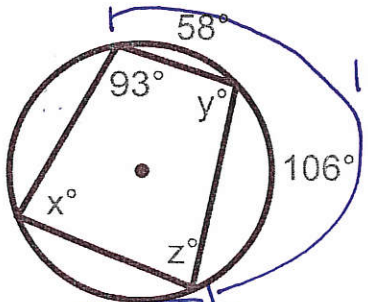
8.



$x=72°$

$y=92°$

9.



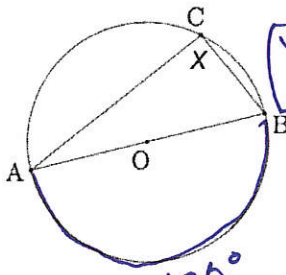
164

$x=82°$

$y=98°$

$z=87°$

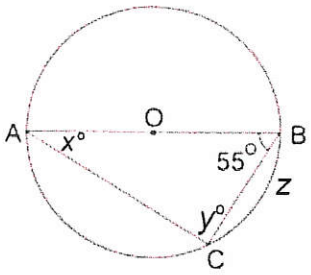
10.



$x = 90°$

180°

11.

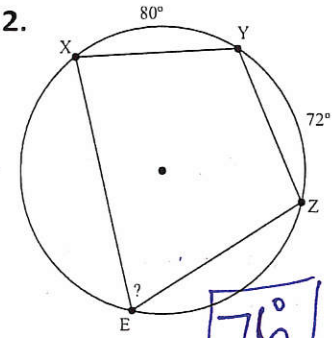


$y = 90°$

$x = 35°$

12-14. Find the measure of the arc or angle.

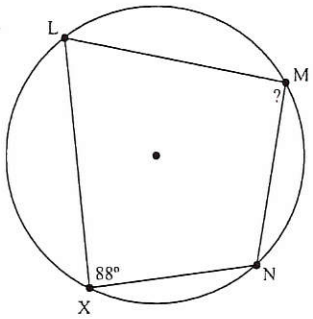
12.



$\frac{152}{2}$

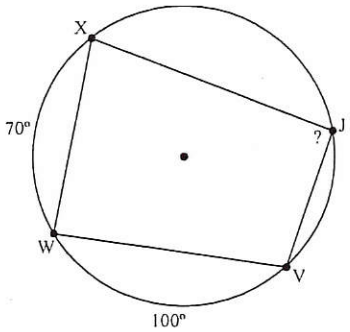
76°

13.



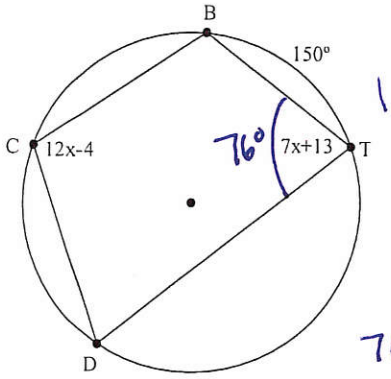
180
− 88
92°

14.



$\frac{170}{2} = 85°$

15. *Find* $m\widehat{DB}$.



$19x + 9 = 180$

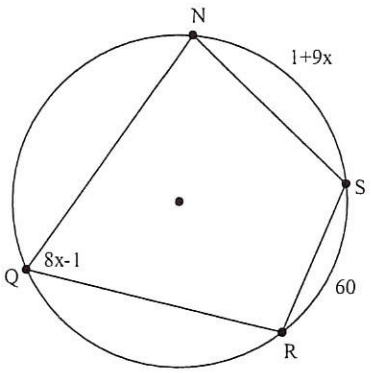
$19x = 171$

$x = 9$

$7(9) + 13 = 76$

$\widehat{DB} = 152°$

16. *Find* $m\widehat{NS}$.



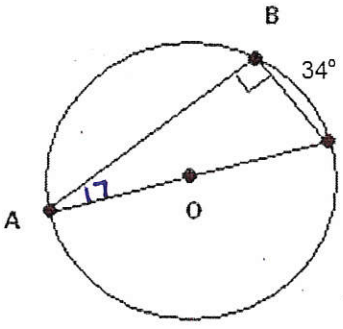
$16x - 2 = 9x + 61$

$7x = 63$

$x = 9$ $\quad 1 + 9(9)$

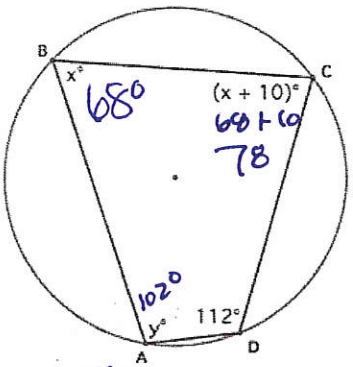
$\widehat{NS} = 82°$

17. *Find* $m\angle BCA$



180
− 17
− 90
73°

18. *Find* x *and* y.



180
− 78

$x = 68°$

$y = 102°$