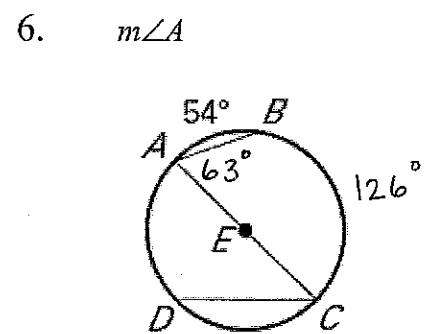
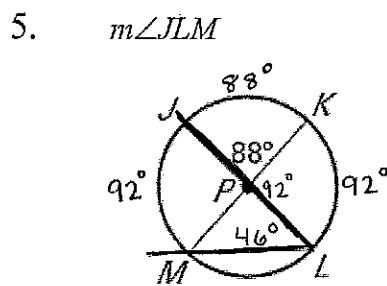
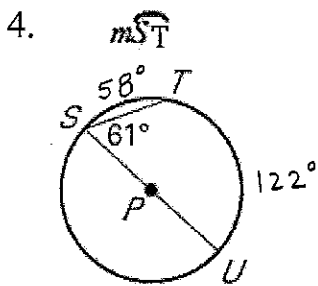
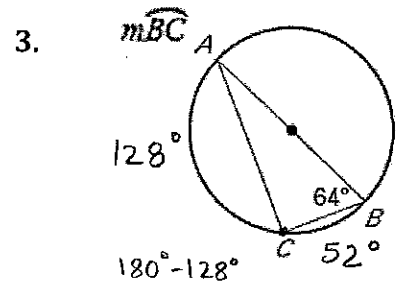
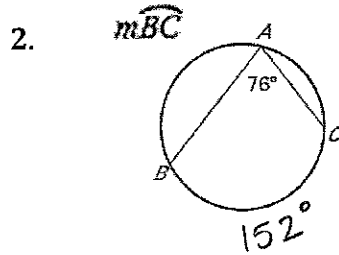
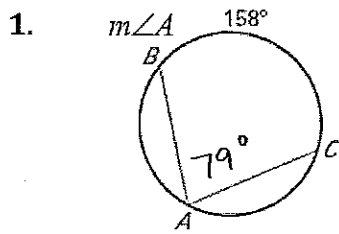


Name: Key

Secondary Math II  
Unit 11 Day 4 Homework

Find the indicated measure.



Find the indicated measure in  $\odot M$ .

7.  $m\angle PNO = 34^\circ$

8.  $m\angle QNP = 31^\circ$

9.  $m\widehat{PQ} = 62^\circ$

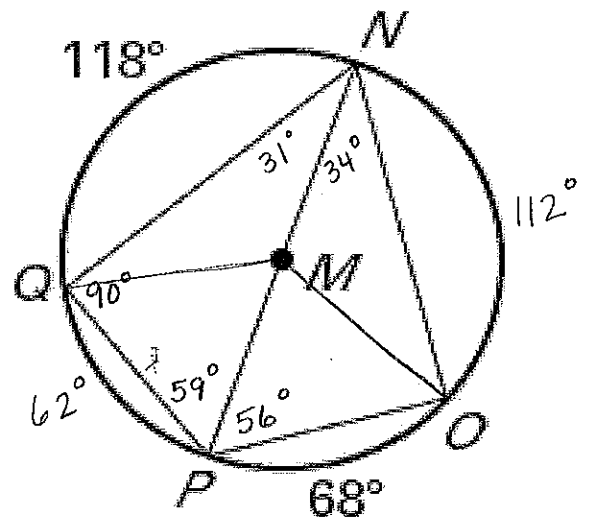
10.  $m\widehat{QO} = 130^\circ$

11.  $m\angle NMO = 112^\circ$

12.  $m\widehat{NOP} = 180^\circ$

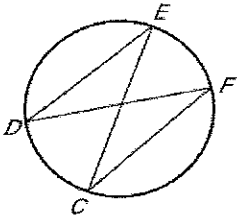
13.  $m\angle QMP = 62^\circ$

14.  $m\widehat{QON} = 242^\circ$

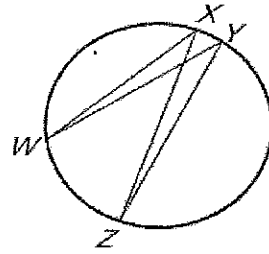


Name the two pairs of congruent angles.

15.



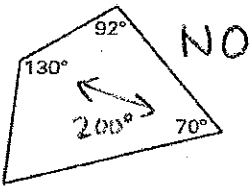
16.  
 $\angle DEF \cong \angle CDF$   
 $\angle EDF \cong \angle FCE$



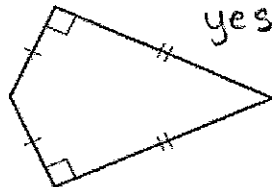
$\angle WXZ \cong \angle WYZ$   
 $\angle XWY \cong \angle YZX$

Decide whether a circle can be circumscribed about the quadrilateral.

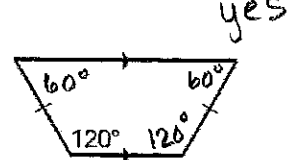
17.



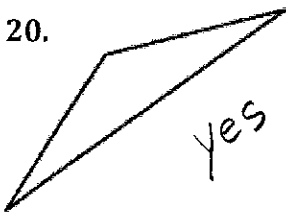
18.



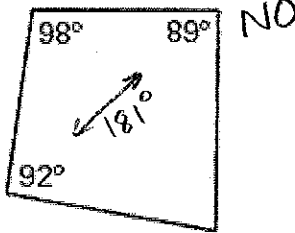
19.



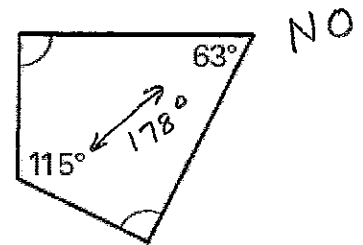
20.



21.

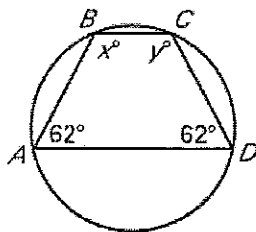


22.



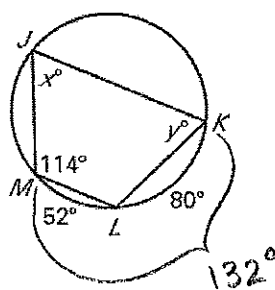
Find the values of the variables for questions 23-28.

23.



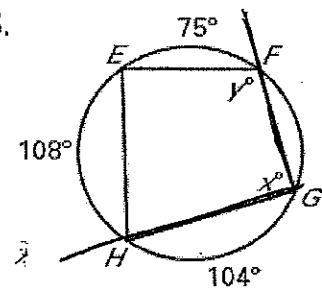
$x = 118^\circ$   
 $y = 118^\circ$

24.



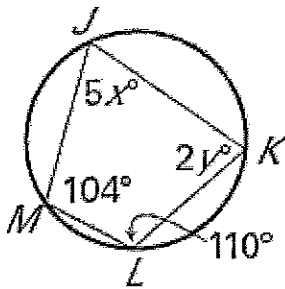
$x = 66^\circ$   
 $y = 66^\circ$

25.



$x = \frac{1}{2}(75 + 108^\circ)$   
 $x = 91.5^\circ$   
 $y = \frac{1}{2}(108 + 104)$   
 $y = 106^\circ$

26.



$$2y + 104 = 180$$

$$2y = 76$$

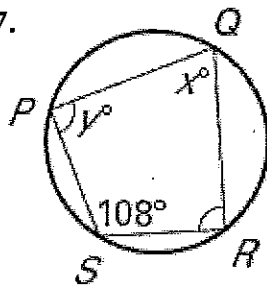
$$y = 38^\circ$$

$$5x + 110 = 180$$

$$5x = 70$$

$$x = 14$$

27.

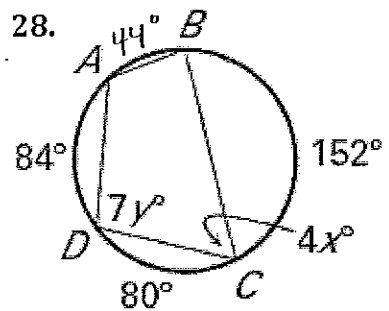


$$y = 90$$

$$108 + x = 180$$

$$x = 72^\circ$$

28.



$$4x = \frac{1}{2}(84 + 44)$$

$$4x = 64$$

$$x = 16$$

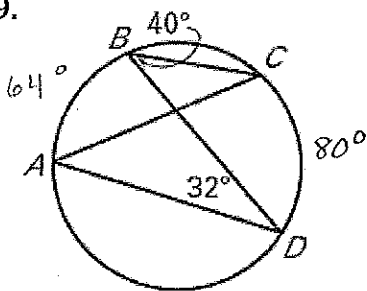
$$7y = \frac{1}{2}(44 + 152)$$

$$7y = 98$$

$$y = 14$$

Find  $m\angle A$  and  $m\angle C$ .

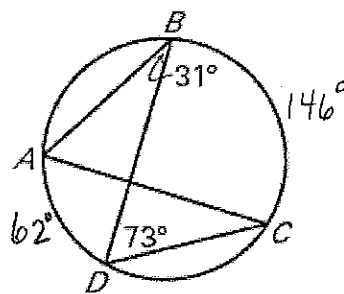
29.



$$\angle A = 40^\circ$$

$$\angle C = 32^\circ$$

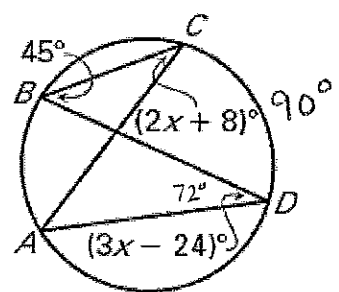
30.



$$\angle A = 73^\circ$$

$$\angle C = 31^\circ$$

31.



$$2x + 8 = 3x - 24$$

$$32 = x$$

$$\angle A = 45^\circ$$

$$\angle C = 72^\circ$$

Find the measure of the indicated angle or arc in  $\odot P$ , given  $m\widehat{LM} = 84^\circ$  and  $m\widehat{KN} = 116^\circ$ .

32.  $m\angle JKL = 90^\circ$

33.  $m\angle MKL = 42^\circ$

34.  $m\angle KMN = 58^\circ$

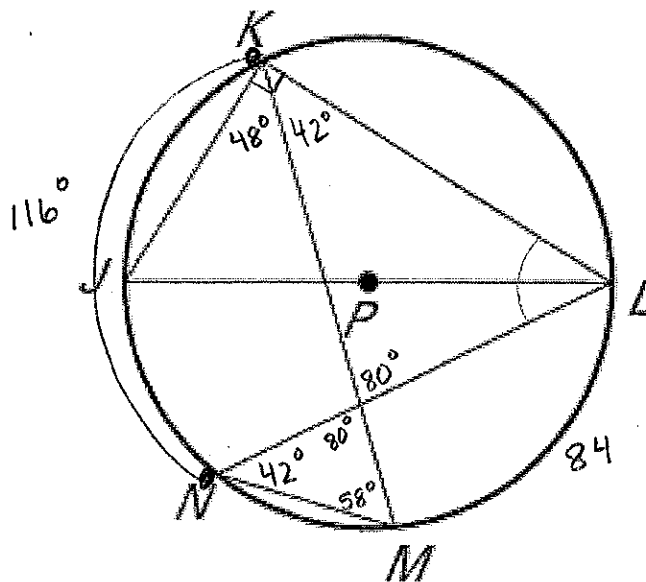
35.  $m\angle JKM = 48^\circ$

36.  $m\angle KLN = 58^\circ$

37.  $m\angle LNM = 42^\circ$

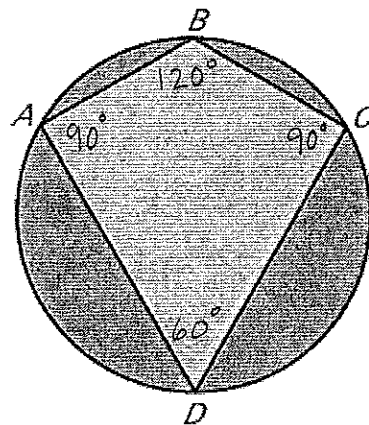
38.  $m\widehat{MJ} = 96^\circ$

39.  $m\widehat{LKJ} = 180^\circ$



s

40. **Stained Glass** You are making the stained glass ornament shown at the right. The kite is symmetric, so  $\angle A \cong \angle C$ ,  $\overline{BD}$  is a diameter of the circle, and  $m\angle D = 60^\circ$ . What are the measures of  $\angle A$ ,  $\angle B$ , and  $\angle C$ ?



$$\begin{aligned} \angle A &= 90^\circ \\ \angle B &= 120^\circ \\ \angle C &= 90^\circ \end{aligned}$$