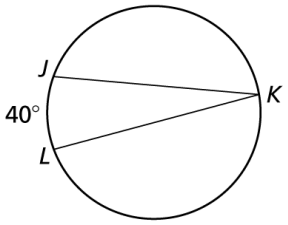
Name _____ Date _____

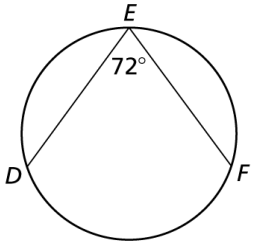
10.4 Practice A

In Exercises 1–3, find the indicated measure.

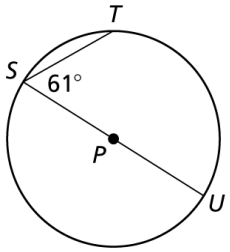
1. $m\angle K$



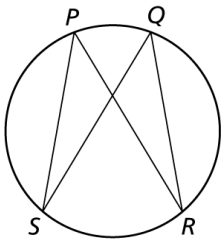
2. $m\overset{\frown}{DF}$



3. $m\overset{\frown}{ST}$



4. In the diagram shown, which statement is true? Explain.

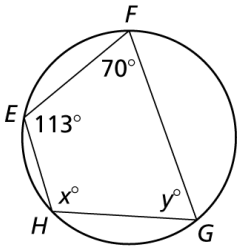


A. $\angle SPR \cong \angle PSQ$ **B.** $\angle RQS \cong \angle RPS$

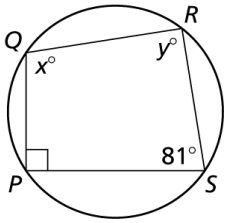
C. $\angle RPS \cong \angle PRQ$ **D.** $\angle PRQ \cong \angle SQR$

In Exercises 5–7, find the value of each variable.

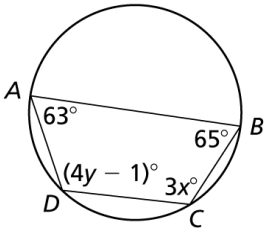
5.



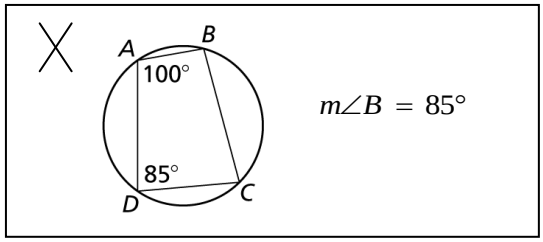
6.



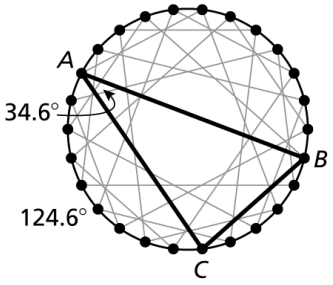
7.



8. Describe and correct the error in finding $m\angle B$.



9. You make a design using a pencil and a circular wheel, as shown.



a. Find $m\angle ABC$.

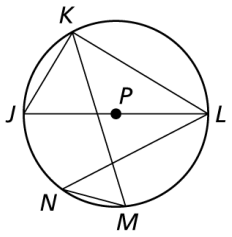
b. Find $m\angle ACB$.

c. What type of triangle is $\triangle ABC$? Explain.

Name _____ Date _____

10.4 Practice B

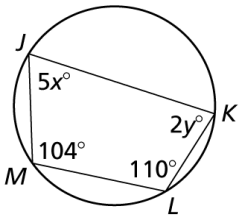
In Exercises 1–8, find the measure of the indicated arc or angle in ⊙ *P* given $m\overset{\frown}{LM} = 84°$ and $m\overset{\frown}{KN} = 116°$.



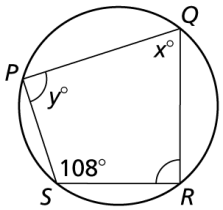
1. $m\angle JKL$
2. $m\angle MKL$
3. $m\angle KMN$
4. $m\angle JKM$
5. $m\angle KLN$
6. $m\angle LNM$
7. $m\overset{\frown}{MJ}$
8. $m\overset{\frown}{LKJ}$

In Exercises 9–11, find the value of each variable.

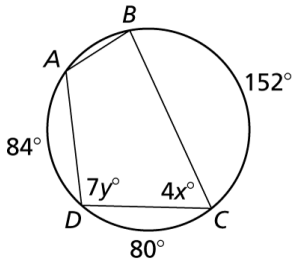
9.



10.



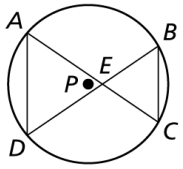
11.



12. Copy and complete the proof.

Given: ⊙ *P*

Prove: $\triangle AED \sim \triangle BEC$



STATEMENTS	**REASONS**
1. ⊙ *P*	**1.** Given
2. _____	**2.** Vertical Angles Congruence Theorem (Thm. 2.6)
3. $\angle CAD \cong \angle DBC$	**3.** _____
4. $\triangle AED \sim \triangle BEC$	**4.** _____

13. Your friend claims that the angles $\angle ADB$ and $\angle BCA$ could be used in Step 3 of Exercise 12. Is your friend correct? Explain your reasoning.

14. Determine whether $\overline{AB}$ is a diameter of the circle. Explain your reasoning.