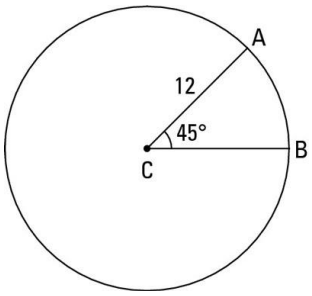
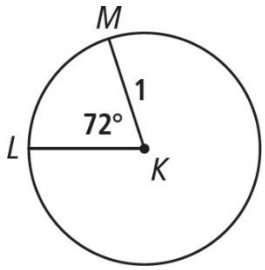
Geometry Test – Circles **Name** _____

1. What is the length of $\overset{\frown}{AB}$?



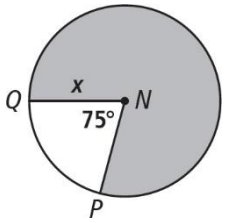
_____

2. What is the length of $\overset{\frown}{LM}$? You may express your answer as a decimal or by including π.



_____

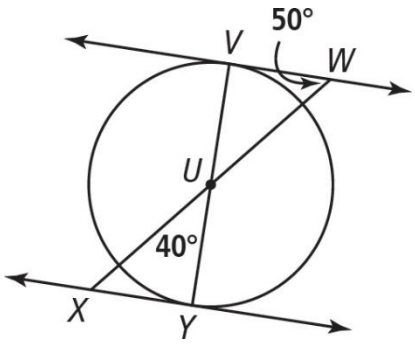
3. What is the area of the UNshaded part of $\odot N$? You may express your answer in terms of π or as a decimal. Let x = 4.



_____

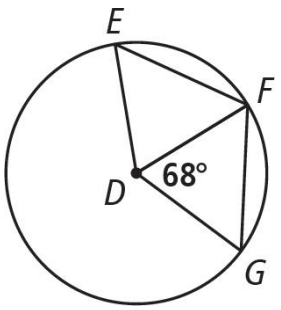
4. $\overleftrightarrow{XY}$ is tangent to $\odot U$ at point Y. Is each statement true for $\odot U$?

	Yes	No
$m\angle VUW = m\angle UXY$	□	□
$m\angle VWU = m\angle YXU$	□	□
$\overleftrightarrow{VW}$ is tangent to $\odot U$ at point V.	□	□



5. Given $\odot D$ and $\overline{EF} \cong \overline{FG}$, what is $m\widehat{EF}$?

A 34
B 38
C 68
D 136



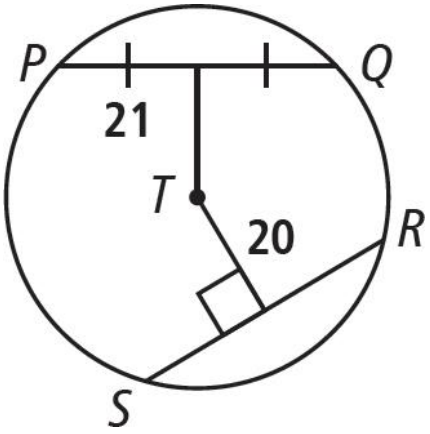
For Items 6 and 7, use $\odot T$ with $\overline{PQ} \cong \overline{SR}$.

6. What is SR?

A 58
B 42
C 41
D 40

7. What is the radius of $\odot T$?

A 20
B 21
C 29
D 41



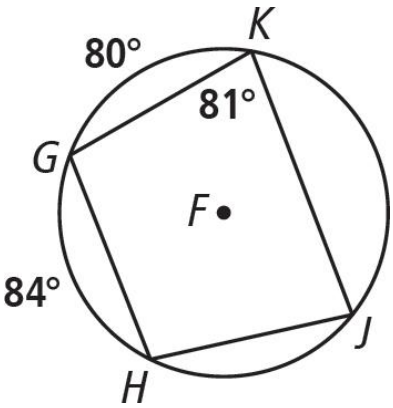
For Items 8 and 9, use $\odot F$.

8. What is $m\angle HJK$?

A 80
B 81
C 82
D 84

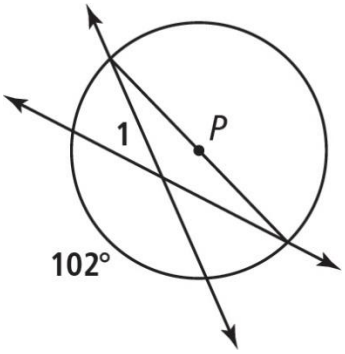
9. What is $m\widehat{HJ}$?

A 82
B 81
C 80
D 78



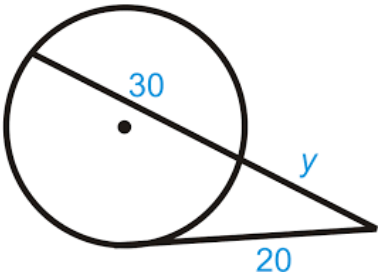
10. In $\odot Q$, what is $m\angle 1$?

A 33
B 39
C 51
D 57



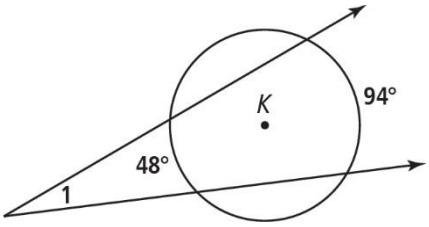
_____

11. For the circle shown below, what is the value of y?



_____

12. What is $m\angle 1$?



A 21
B 23
C 24
D 47

FIRST…. Take a deeeeeeep breath…….ok
For BONUS questions 1-3, use $\odot P$ with all of the following pieces of information:

$m\angle KPH = 100$, $\overline{HK} \cong \overline{LN}$, and $\overline{JK} \cong \overline{LM}$.

1. Which angle is congruent to $\angle JPH$?

2. If $m\overset{\frown}{LM} = 60$, what is $m\overset{\frown}{JH}$?

3. Which segment is congruent to $\overline{MN}$?