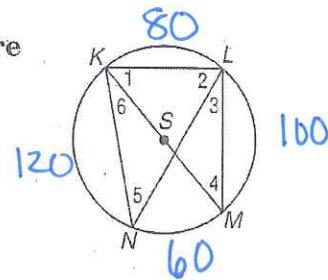


10-4 Skills Practice

Inscribed Angles

In $\odot S$, $m\widehat{KL} = 80$, $m\widehat{LM} = 100$, and $m\widehat{MN} = 60$. Find the measure of each angle.



1. $m\angle 1 = 50$

2. $m\angle 2 = 60$

3. $m\angle 3 = 30$

4. $m\angle 4 = 40$

5. $m\angle 5 = 40$

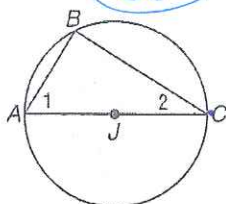
6. $m\angle 6 = 30$

ALGEBRA Find the measure of each numbered angle.

7. $m\angle 1 = 5x - 2$, $m\angle 2 = 2x + 8$

$= 58^\circ$

$= 32^\circ$



$5x - 2 + 2x + 8 = 90$

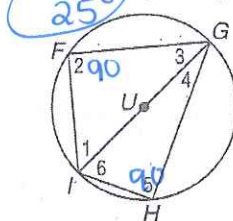
$7x + 6 = 90$

$7x = 84$

$x = 12$

8. $m\angle 1 = 5x$, $m\angle 3 = 3x + 10$

$m\angle 4 = y + 7$, $m\angle 6 = 3y + 11$



$5x + 3x + 10 = 90$

$8x = 80$

$x = 10$

$y + 7 + 3y + 11 = 90$

$4y + 18 = 90$

$4y = 72$

$y = 18$

Quadrilateral $RSTU$ is inscribed in $\odot P$ such that $m\widehat{STU} = 220$ and $m\angle S = 95$. Find each measure.

9. $m\angle R = 110^\circ$

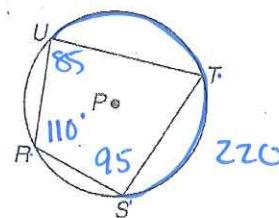
10. $m\angle T = 70^\circ$

11. $m\angle U = 85^\circ$

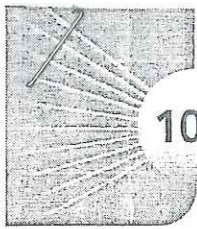
12. $m\widehat{SRU} = 140^\circ$

13. $m\widehat{RUT} = 190^\circ$

14. $m\widehat{RST} = 170^\circ$



Lesson 10-4



10-4 Practice

Inscribed Angles

In $\odot B$, $m\widehat{WX} = 104$, $m\widehat{WZ} = 88$, and $m\angle ZWY = 26$. Find the measure of each angle.

1. $m\angle 1 = 52^\circ$

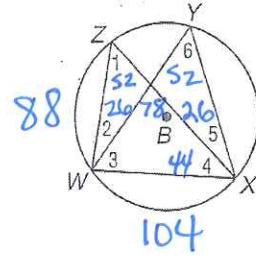
2. $m\angle 2 = 26$

3. $m\angle 3 = 58$

4. $m\angle 4 = 44$

5. $m\angle 5 = 26$

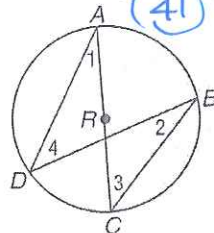
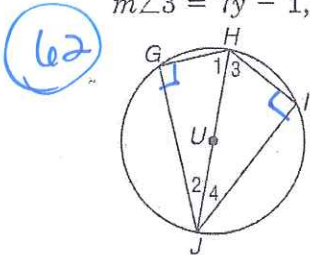
6. $m\angle 6 = 52$



ALGEBRA Find the measure of each numbered angle.

7. $m\angle 1 = 5x + 2$, $m\angle 2 = 2x - 3$
 $m\angle 3 = 7y - 1$, $m\angle 4 = 2y + 10$

8. $m\angle 1 = 4x - 7$, $m\angle 2 = 2x + 11$,
 $m\angle 3 = 5y - 14$, $m\angle 4 = 3y + 8$



$5x + 2 + 2x - 3 = 90$
 $7x - 1 = 90$
 $7x = 91$
 $x = 13$

$7y - 1 + 2y + 10 = 90$
 $9y + 9 = 90$
 $9y = 81$
 $y = 9$

$4x - 7 = 2x + 11$
 $2x = 18$
 $x = 9$

$5y - 14 = 3y + 8$
 $2y = 22$
 $y = 11$

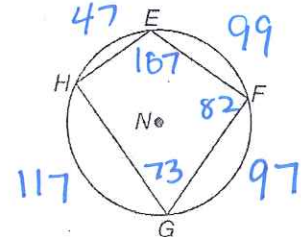
Quadrilateral $EFGH$ is inscribed in $\odot N$ such that $m\widehat{FG} = 97$, $m\widehat{GH} = 117$, and $m\widehat{EH} = 164$. Find each measure.

9. $m\angle E = 107$

10. $m\angle F = 82$

11. $m\angle G = 73$

12. $m\angle H = 98$



13. PROBABILITY In $\odot V$, point C is randomly located so that it does not coincide with points R or S . If $m\widehat{RS} = 140$, what is the probability that $m\angle RCS = 70^\circ$?

100%

