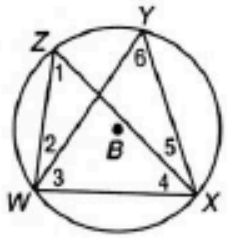
Inscribed Angles

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



1. $m\angle 1$

2. $m\angle 2$

3. $m\angle 3$

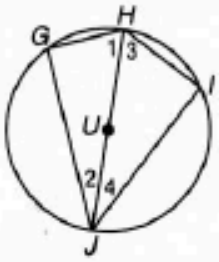
4. $m\angle 4$

5. $m\angle 5$

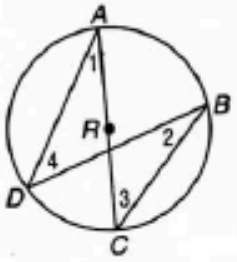
6. $m\angle 6$

ALGEBRA Find the measure of each numbered angle.

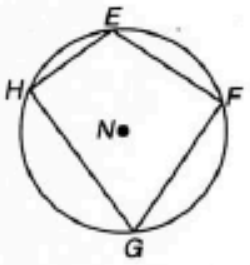
7. $m\angle 1 = 5x + 2$, $m\angle 2 = 2x - 3$
   $m\angle 3 = 7y - 1$, $m\angle 4 = 2y + 10$



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



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



9. $m\angle E$

10. $m\angle F$

11. $m\angle G$

12. $m\angle H$

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