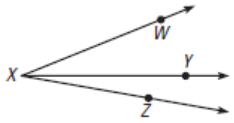
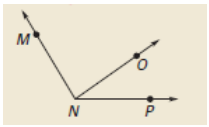
Name _____ Date _____

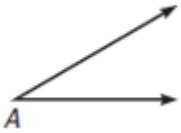
Angle Measurements

Name all angles in the figure.

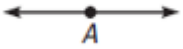
1. 

2. 

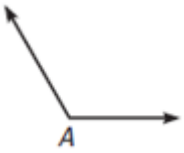
Classify each angle below.

3. 

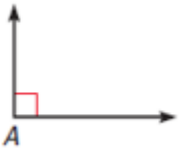
$0° < m\angle A < 90°$

4. 

$m\angle A = 180°$

5. 

$90° < m\angle A < 180°$

6. 

$m\angle A = 90°$

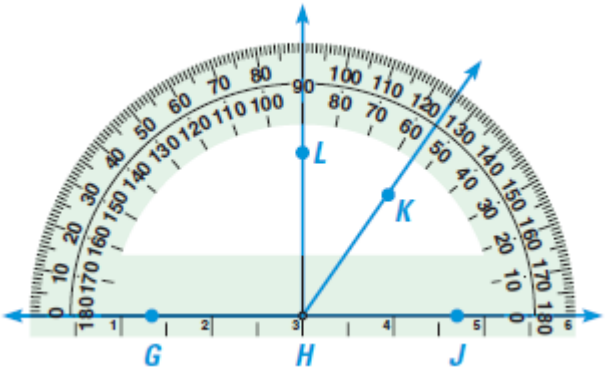
Use the diagram to determine the measure of the indicated angle.

7. ∠ KHJ

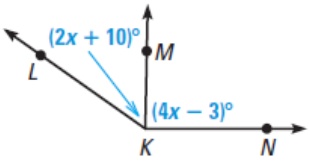
8. ∠ GHK

9. ∠ GHJ

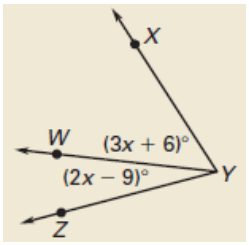
10. ∠ GHL



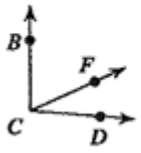
11. Given that m∠LKN = 43,
find m∠LKM and m∠ MKN



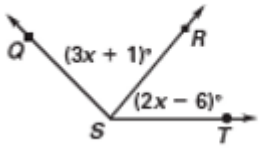
12. Given that m∠XYZ = 72,
find m∠XYW and m∠ ZYW



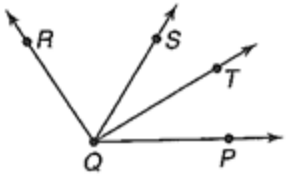
13. $m\angle FCD = x + 41$, $m\angle BCF = x + 78$, and $m\angle BCD = 95°$. Find x.



14. Given $m\angle QST = 135°$, find $m\angle QSR$.

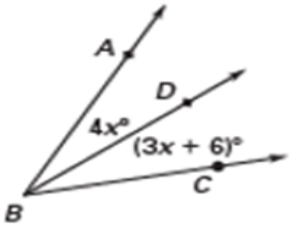


15. In the figure at the right, if $\overrightarrow{QS}$ bisects $\angle RQP$, $m\angle RQS = 2x + 10$, and $m\angle SQP = 3x - 18$, find $m\angle SQR$.

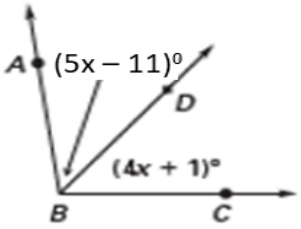


In the diagram, $\overrightarrow{BD}$ bisects $\angle ABC$. Find $m\angle ABC$.

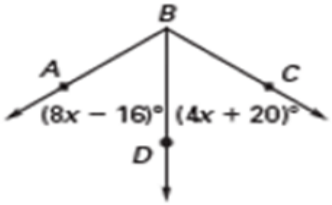
16.



17.



18.



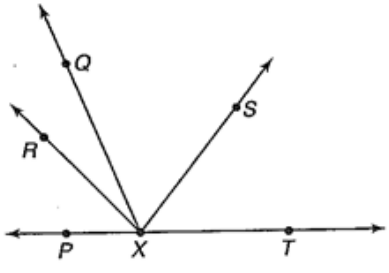
In the figure, $\overrightarrow{XP}$ and $\overrightarrow{XT}$ are opposite rays and $\overrightarrow{XQ}$ bisects $\angle PXS$. For each situation, find the value of x and the measure of the indicated angle.

19. $m\angle SXT = 4x + 1$, $m\angle QXS = 2x - 2$, $m\angle QXT = 125$; $m\angle QXS$

20. $m\angle PXR = 3x$, $m\angle RXT = 5x + 20$, $m\angle RXT$

21. $m\angle RXQ = x + 15$, $m\angle RXS = 5x - 7$, $m\angle QXS = 3x + 5$; $m\angle RXS$

22. $m\angle TXS = x + 3$, $m\angle SXR = 2x + 9$, $m\angle RXP = 4x - 7$; $m\angle PXS$



23. $m\angle RXQ = 2x + 7$, $m\angle RXP = 3x - 11$, $m\angle PXS = x + 37$; $m\angle QXS$