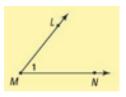
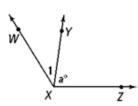
What are two other names for  $\angle 1$ . Name the vertex and the sides of  $\angle 1$ .

1.

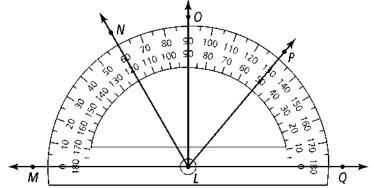


2.



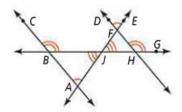
Use the diagram below. Find the measure of each angle. Then classify the angle as acute, right, obtuse or

- straight.
- 3. *m*∠*MLP*
- 4. m∠PLN
- 5. m∠MLQ
- 6. *m*∠*QLO*



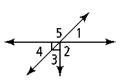
Use the diagram at the right to complete each statement.

8. If 
$$m \angle GHF = 120^{\circ}$$
, then  $m \angle ___ = 120^{\circ}$ .

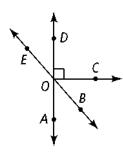


Use the diagram at the right to determine if each statement is true or false.

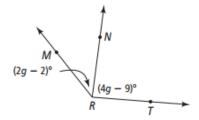
- 9.  $\angle 2$  and  $\angle 5$  are adjacent angles.
- $10.\angle 1$  and  $\angle 5$  are a linear pair.
- 11.  $\angle 4$  and  $\angle 5$  are complementary.



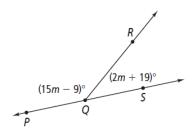
- Name an angle or angles in the diagram described by each of the following.
- 12. complementary to  $\angle BOC$
- 13. supplementary to  $\angle EOA$
- 14. A pair of vertical angles
- 15. An angle adjacent to  $\angle EOD$
- 16. An angle that forms a linear pair with  $\angle COB$ .



17. If  $m \angle MRT = 133$ , what are  $m \angle MRN$  and  $m \angle NRT$ ?



18. Use the figure below to find the value of  $m, m \angle PQR$  and  $m \angle SQR$ .



- 19.  $\angle 1$  and  $\angle 2$  are supplementary angles. If  $m \angle 1 = 4y + 7$  and  $m \angle 2 = 9y + 4$ . What is  $m \angle 2$ ?
- 20.  $\angle XYZ$  and  $\angle XYW$  are complementary angles. If  $m\angle XYZ = 3x + 9$  and  $m\angle XYW = 5x + 9$ . What are  $m\angle XYZ$  and  $m\angle XYW$ ?
- 21.  $\overrightarrow{QR}$  bisects $\angle PQS$ . If  $m\angle PQR = 60$ , find  $m\angle RQS$  and  $m\angle PQS$ .

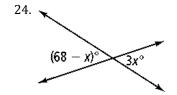


## $\overrightarrow{QS}$ bisects $\angle PQR$ . Solve for x and find $m\angle PQR$ .

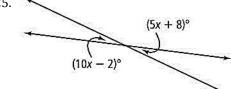
22. 
$$m \angle PQS = 3x$$
;  $m \angle SQR = 5x - 20$ 

23. 
$$m \angle PQS = 2x + 1$$
;  $m \angle RQS = 4x - 15$ 

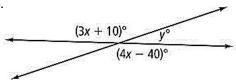
## Solve for the variables.



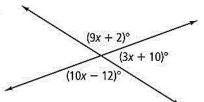
25.



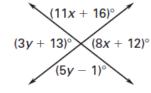
26.



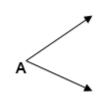
 $(10x - 18)^{\circ}$   $(8x + 14)^{\circ}$ 



29.



30. Construct a congruent angle.



31. Construct an angle bisector.

