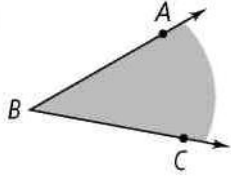


# Handout 1.4: Measuring Angles

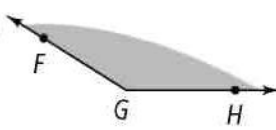
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

Name each angle is three different ways.

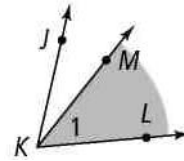
1.



2.



3.



Use the diagram below. Find the measure of each angle and classify it as *acute*, *right*, *obtuse*, or *straight*.

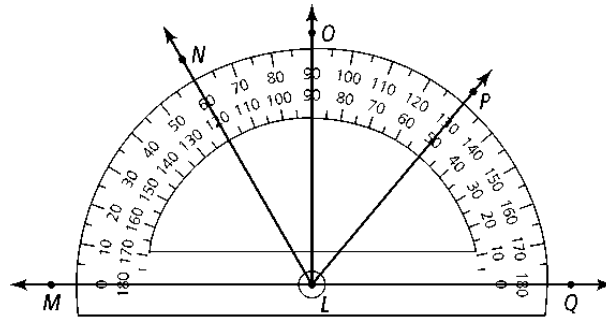
4.  $\angle MLN$

5.  $\angle NLP$

6.  $\angle NLQ$

7.  $\angle OLP$

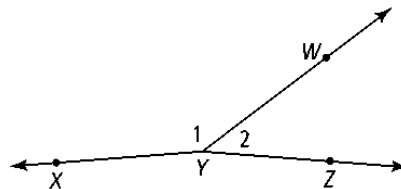
8.  $\angle MLQ$



Use the diagram at the right.

9. What are two other names for  $\angle XYW$ ?

10. What are two other names for  $\angle WYZ$ ?



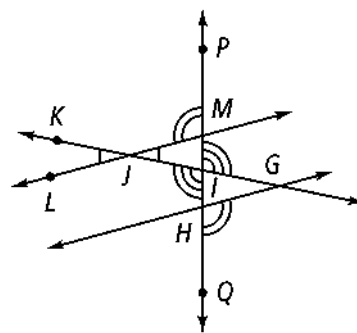
Use the diagram at the right to complete each statement.

11.  $\angle MIG \cong$

12.  $\angle PMJ \cong$

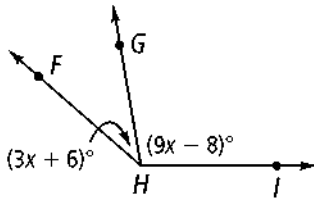
13. If  $m\angle KJL = 30$ , then  $m\angle$    $= 30$ .

14. If  $m\angle LMP = 100$ , then  $m\angle QHG =$  .

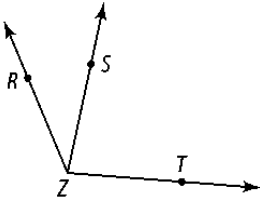


15.  $\angle JNR$  and  $\angle RNX$  are congruent. If the sum of the measures of the two angles is 180, what type of angle are they?

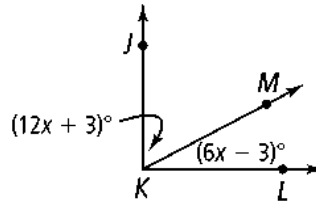
16. If  $m\angle FHI = 142$ , what are  $m\angle FHG$  and  $m\angle GHI$ ?



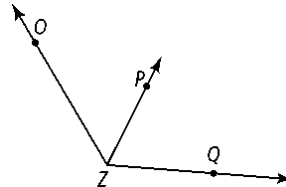
18. If  $m\angle RZT = 110$ ,  $m\angle RZS = 3s$ , and  $m\angle TZS = 8s$ , what are  $m\angle RZS$  and  $m\angle TZS$ ?



17.  $\angle JKL$  is a right angle. What are  $m\angle JKM$  and  $m\angle MKL$ ?



19.  $m\angle OZP = 4r + 2$ ,  $m\angle PZQ = 5r - 12$ , and  $m\angle OZQ = 125$ . What are  $m\angle OZP$  and  $m\angle PZQ$ ?



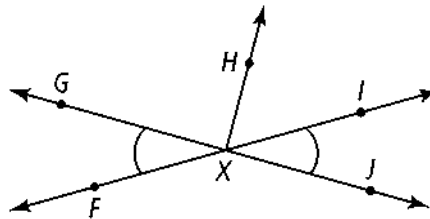
Use the figure at the right for Exercises 20–23.  $m\angle FXH = 130$  and  $m\angle FXG = 49$ .

20.  $\angle FXG \cong$

21.  $m\angle GXH =$

22. Name a straight angle in the figure.

23.  $\angle IXJ \cong$

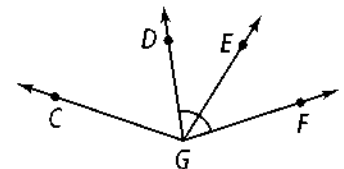


24. Elsa draws an angle that measures 56. Tristan draws a congruent angle. Tristan says his angle is obtuse. Is he correct? Why or why not?

25. Lisa makes a cherry pie and an apple pie. She cuts the cherry pie into six equal wedges and she cuts the apple pie into eight equal wedges. How many degrees greater is the measure of a cherry pie wedge than the measure of an apple pie wedge?

Use the diagram to the right for 26-27.

26. If  $m\angle CGD = 4x + 2$ ,  $m\angle DGE = 3x - 5$ ,  $m\angle EGF = 2x + 10$ , find the value of  $x$ .



27. If  $m\angle CGD = 2x - 2$ ,  $m\angle EGF = 37$ ,  $m\angle CGF = 7x + 2$ , find the value of  $x$ .