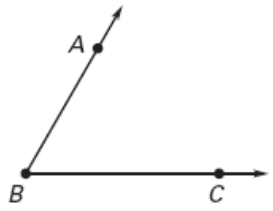
Geometry A
Section 1.4 Homework

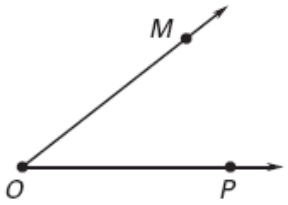
Name : _____
Date : _____ Period : _____

Write two names for the angle. Then name the vertex and the sides of the angle.

1.



2.



3.

Classify the angle with the given measure as *acute, obtuse, right,* or *straight.*

4. $m\angle A = 115°$

5. $m\angle A = 85°$

6. $m\angle A = 90°$

7. $m\angle A = 170°$

Give another name for the angle in the diagram. Tell whether the angle appears to be *acute, obtuse, right,* or *straight.*

8. $\angle JKN$

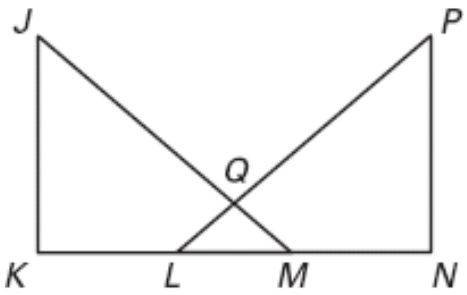
9. $\angle KMN$

10. $\angle PQM$

11. $\angle JML$

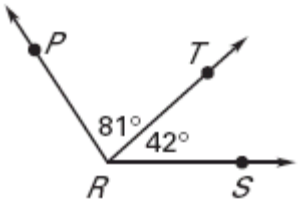
12. $\angle QPN$

13. $\angle PLK$

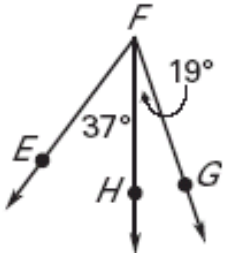


Find the indicated angle measure.

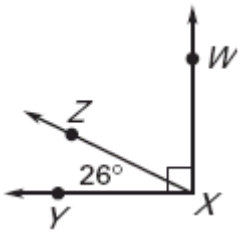
14. $m\angle PRS =$ __?__



15. $m\angle EFG =$ __?__

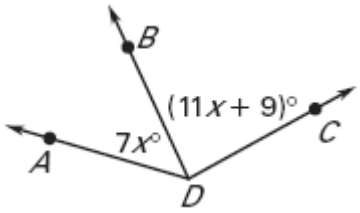


16. $m\angle WXZ =$ __?__

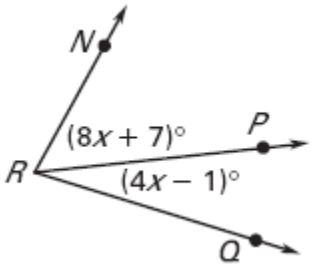


Use the given information to find the indicated angle measure.

17. Given $m\angle ADC = 135°$, find $m\angle BDC$.

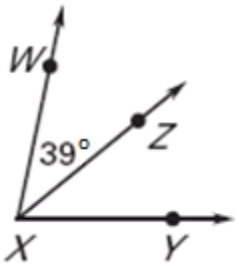


18. Given $m\angle NRQ = 78°$, find $m\angle PRQ$.

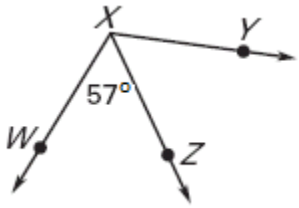


Given that $\overrightarrow{XZ}$ bisects $\angle WXY$, find the two angle measures not given in the diagram.

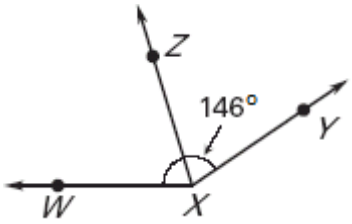
19.



20.

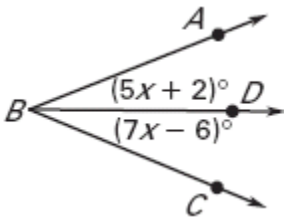


21.

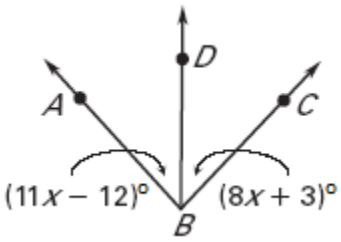


In each diagram, $\overrightarrow{BD}$ bisects $\angle ABC$. Find $m\angle ABC$.

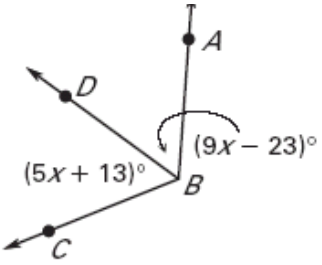
22.



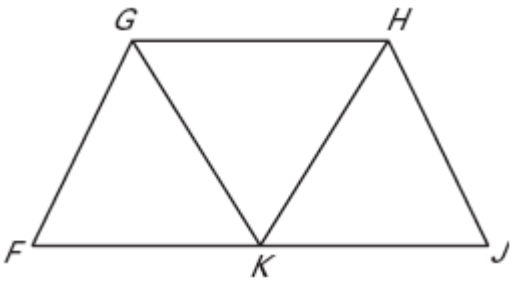
23.



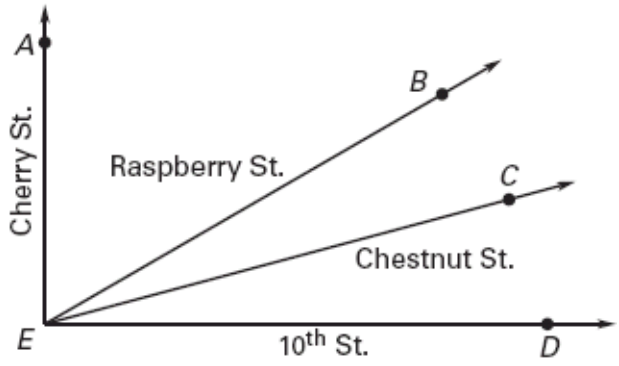
24.



25. **Bridge** In the bridge shown below, the measure of $\angle FGH$ is 116° and $\overline{GK}$ bisects $\angle FGH$. What is the measure of $\angle FGK$?



26. **Streets** The diagram shows the intersection of four streets. In the diagram, $m\angle AEB = 60°$, $m\angle BEC = m\angle CED$, and $\angle AED$ is a right angle. What is the measure of $\angle CED$?



Answer Key

1) Names: $\angle ABC, \angle CBA$; Vertex: *B*; Sides: $\overrightarrow{BA}, \overrightarrow{BC}$

2) Names: $\angle MOP, \angle POM$; Vertex: *O*; Sides: $\overrightarrow{OM}, \overrightarrow{OP}$

3) Names: $\angle EFG, \angle GFE$; Vertex: *F;* Sides: $\overrightarrow{FE}, \overrightarrow{FG}$

4) Obtuse

5) Acute

6) Straight

7) Obtuse

8) $\angle NKJ$; Right

9) $\angle NMK$; Straight

10) $\angle MQP$; Acute

11) $\angle LMJ$; Acute

12) $\angle NPQ$; Acute

13) $\angle KLP$; Obtuse

14) 123°

15) 56°

16) 64°

17) x = 7, 86°

18) x = 6, 23°

19) $m\angle ZXY = 39°, m\angle WXY = 78°$

20) $m\angle YXZ = 57°, m\angle WXY = 114°$

21) $m\angle WXZ = 73°, m\angle YXZ = 73°$

22) x = 4, 44°

23) x = 5, 86°

24) x = 9, 116°

25) 58°

26) 15°