Name Answer Key Date

LESSON 1.4

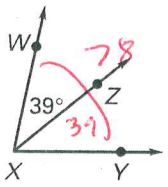
Practice A *continued*

For use with the lesson "Measure and Classify Angles"

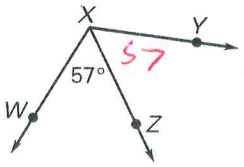
Given that $\overrightarrow{XZ}$ bisects $\angle WXY$, find the two angle measures not given in the diagram.

m∠WXZ = m∠ZXY
78 = 78

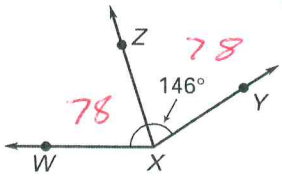
23.



24.



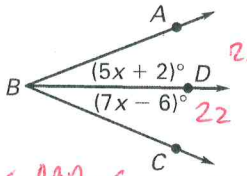
25.



148/2 = 78

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

26.



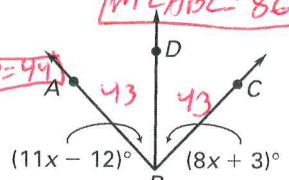
22
22

mCABD = mCDBC
5x + 2 = 7x − 6
−5x −5x
2 = 2x − 6
+6 +6
8 = 2x
4 = x

mCABD = 5x + 2
= 5(4) + 2
= 22

mCDBC = 7x − 6
= 7(4) − 6
= 22

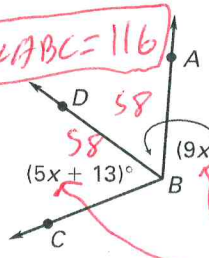
27.



mCABC = 86
mCABD = 43

11x − 12 = 8x + 3
3x = 15
x = 5

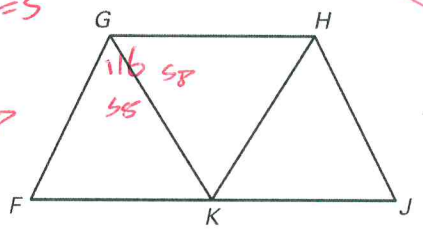
28.



mCABC = 116

mCCBD = mCDBA
5x + 18 = 9x − 23
−5x −5x
13 = 4x − 23
+23 +23
36 = 4x
4 4
9 = x

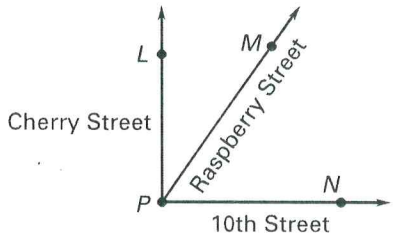
29. Bridge In the bridge shown at the right, the measure of $\angle FGH$ is 116° and $\overline{GK}$ bisects $\angle FGH$. What is the measure of $\angle FGK$?



mCFGK = 58

116/2 = 58

30. Streets The diagram shows the intersection of three streets. The measure of $\angle MPN$ is 55° and $\angle LPN$ is a right angle. What is the measure of $\angle LPM$?



mCLPM + mCMPN = mCLPN
mCLPM + 55 = 90
−55 −55

mCLPM = 35