



6-3 Vocabulary Applications

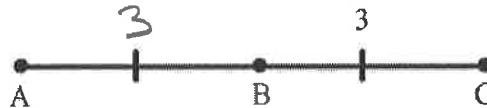
1. Give another name for $\overline{AB}$. $\overline{BA}$



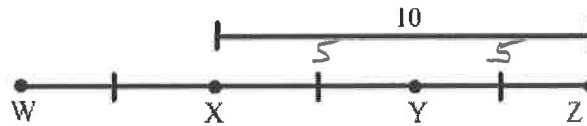
2. Give another name for $\overrightarrow{FG}$. $\overrightarrow{FH}$



3. What is the length of $\overline{AC}$? 6



4. What is the length of $\overline{WX}$? 5

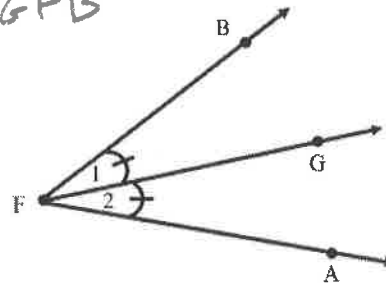


5. Give another name for angle 1. $\angle BFG$ or $\angle GFB$

6. Give another name for angle 2. $\angle GFA$

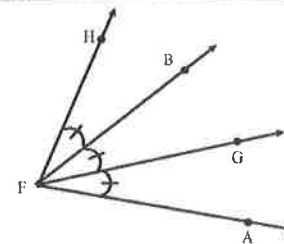
7. $\overrightarrow{FG}$ is a bisector of $\angle AFB$.

8. If the measure of angle 1 is 37° , then what is the measure of $\angle BFA$? $37 \cdot 2 = 74^\circ$

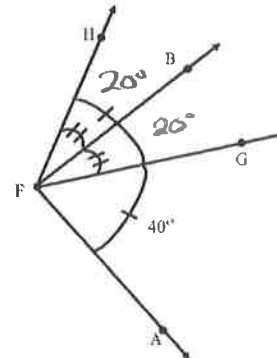


9. If the $m\angle AFH = 86^\circ$, then what is the $m\angle HFB$? 28.6°

$$\frac{86}{3}$$



10. What is the $m\angle BFG$? 20°



11. Give another name for $\overline{AR}$. $\overline{RA}$



12. Give another name for $\overline{MX}$. $\overline{MB}$



For numbers 13-15, sketch the given situation.

13. Point D is between points R and S on line m .



14. $\overline{SR}$



15. $\overline{PQ}$ intersects line n at point Q.

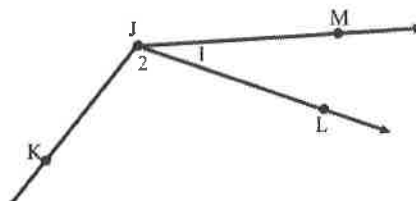


For numbers 16-18, give another name for each angle.

16. $\angle 1$ $\angle MSL$

17. $\angle 2$ $\angle KJL$

18. $\angle MJK$ $\angle KJM$



For numbers 19-24, use the diagram to the right.

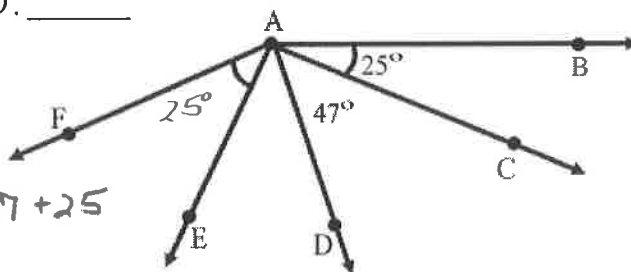
19. Find $m\angle FAE$. 25° 20. Find $m\angle EAD$. _____

21. If $m\angle EAD = 53^\circ$, find $m\angle FAD$. 78°

22. If $\angle EAD \cong \angle CAD$, find $m\angle FAB$. 144°

23. If $m\angle EAD = 37^\circ$, find $m\angle EAB$. $109^\circ = 37 + 47 + 25$

- ★ 24. If $m\angle EAD = 83^\circ$, find $m\angle FAB$. 180°



25. In the diagram to the right, $m\angle BCE = 144^\circ$.

a. Find the value of x . 20

b. Find $m\angle BCD$. 72°

c. Find $m\angle ECD$. 72°

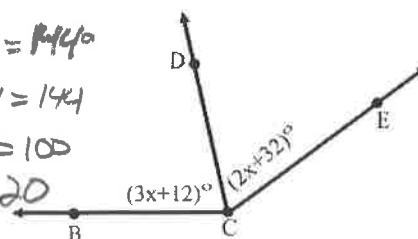
d. Does $\overline{CD}$ bisect $\angle BCE$? Yes!

$$3x + 12 + 2x + 32 = 144$$

$$5x + 44 = 144$$

$$5x = 100$$

$$x = 20$$



26. a. $\overline{AB}$ is a segment with midpoint M. $AM = 3x + 7$ and $MB = x + 9$, solve for x . 1

b. What is the length of $\overline{AB}$? 20 units

$$3x + 7 = x + 9$$

$$2x = 2$$

$$x = 1$$

$$\overline{AM} = 3(1) + 7 = 10$$

$$\times 2$$

$$\underline{20}$$

