

6.1 Perpendicular & Angle Bisectors CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

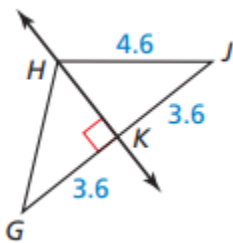
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

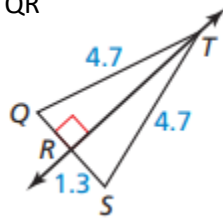
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Properties of Perpendicular Bisectors	1 - 4	5 - 8	
Properties of Angle Bisectors	9 - 11		
Writing Equations of Perpendicular Bisectors			12 - 15

Find the indicated measure. Explain your reasoning.

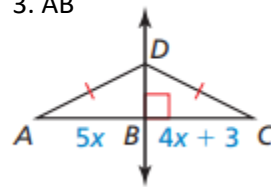
1. GH



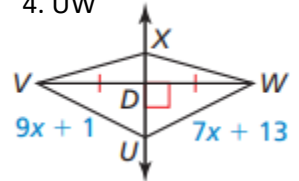
2. QR



3. AB

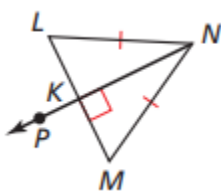


4. UW

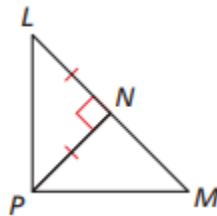


Tell whether the information in the diagram allows you to conclude that point P lies on the perpendicular bisector \overline{LM} . Explain your reasoning.

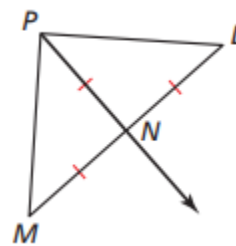
5.



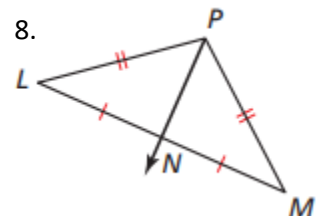
6.



7.

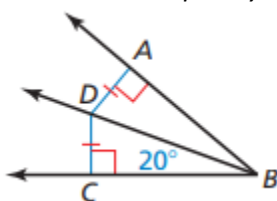


8.

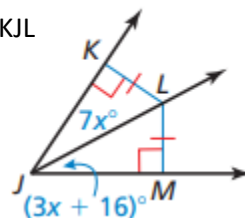


Find the indicated measure. Explain your reasoning.

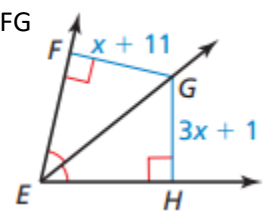
9. $m\angle ABD$



10. $m\angle KJL$



11. FG



Write an equation of the perpendicular bisector of the segment with the given endpoints.

12. M(1, 5) & N (7, - 1)

13. Q(- 2, 0) & R(6, 12)

14. U(- 3, 4) & V(9, 8)

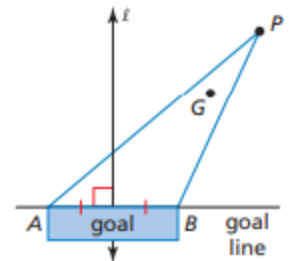
15. Y(10, - 7) & Z(- 4, 1)

16. **MODELING MATHEMATICS:** In the photo, the road is perpendicular to the support beam and $\overline{AB} \cong \overline{CB}$. Which theorem allows you to conclude that $\overline{AD} \cong \overline{CD}$?



17. **MODELING WITH MATHEMATICS:** the diagram shows the position of the goalie and the puck during a hockey game. The goalie is at point G, and the puck is at point P.

a) What should be the relationship between \overrightarrow{PG} and $\angle APB$ to give the goalie equal distances to travel on each side of \overrightarrow{PG} ?



b) How does $m\angle APB$ change as the puck gets closer to the goal? Does this change make it easier or more difficult for the goalie to defend the goal? Explain your reasoning.

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yours elf.

● ● ● ● ● ● ●

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

