LESSON 5.1

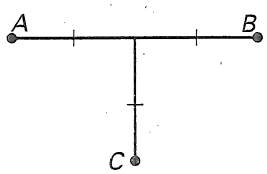
NAME _____ DATE _____

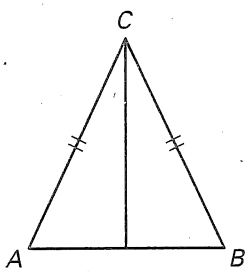
Practice B

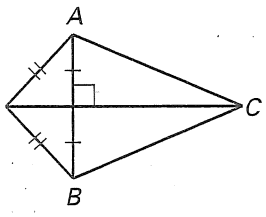
For use with pages 264–271

Lesson 5.1

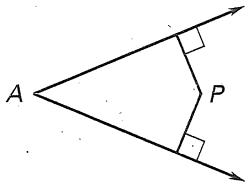
Tell whether the information in the diagram allows you to conclude that C is on the perpendicular bisector of $\overline{AB}$. Explain your reasoning.

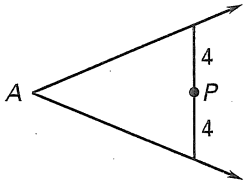
1. 

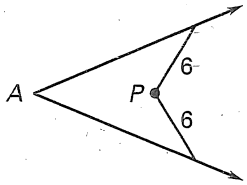
2. 

3. 

Tell whether the information in the diagram allows you to conclude that P is on the bisector of $\angle A$. Explain your reasoning.

4. 

5. 

6. 

Draw $\overline{AB}$ with the given length. Construct the perpendicular bisector and choose point D on the perpendicular bisector so that the distance between D and $\overline{AB}$ is 1 inch. Measure $\overline{AD}$ and $\overline{BD}$.

7. $AB = 1.5$ in.

8. $AB = 2$ in.

9. $AB = 0.5$ in.

Draw $\angle BAC$ with the given measure. Construct the angle bisector and choose point D on the bisector so that $AD = 25$ mm. Measure the distance between D and the sides of $\angle BAC$.

10. $m\angle BAC = 50°$

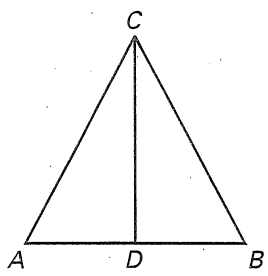
11. $m\angle BAC = 60°$

12. $m\angle BAC = 100°$

Write a two-column or a paragraph proof.

13. **Given:** C is on the perpendicular bisector of $\overline{AB}$.

Prove: $\triangle ADC \cong \triangle BDC$



14. **Given:** $\triangle WOZ \cong \triangle WOY$

Prove: $\overline{XY} \cong \overline{XZ}$