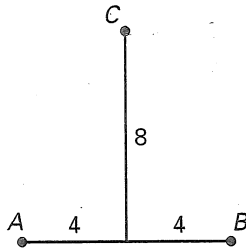


# Practice C

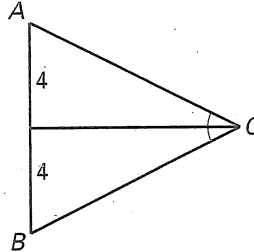
For use with pages 264–271

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

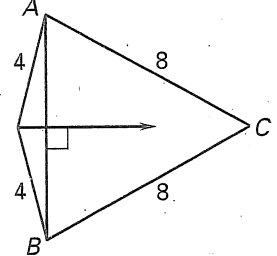
1.



2.

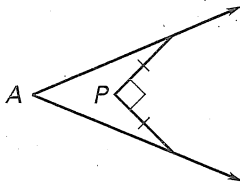


3.

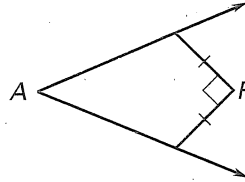


Tell whether the information in the diagram allows you to conclude that  $P$  is on the bisector of  $\angle A$ . Explain your reasoning.

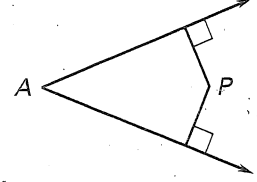
4.



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 2 inches. Measure  $\overline{AD}$  and  $\overline{BD}$ .

7.  $AB = 2$  in.

8.  $AB = 1.25$  in.

9.  $AB = \frac{5}{8}$  in.

Draw  $\angle BAC$  with the given measure. Construct the angle bisector and choose point  $D$  on the bisector so that  $AD = 40$  mm. Measure the distance between  $D$  and the sides of  $\angle BAC$ .

10.  $m\angle BAC = 30^\circ$

11.  $m\angle BAC = 90^\circ$

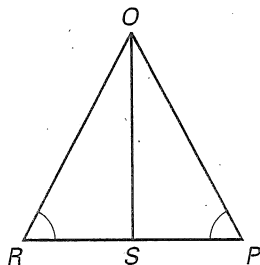
12.  $m\angle BAC = 120^\circ$

Write a two-column or a paragraph proof.

13. Given:  $S$  is on the bisector of  $\angle POR$ .

$$\angle OPS \cong \angle ORS$$

Prove:  $\overline{OS}$  is a perpendicular bisector of  $\overline{PR}$ .



14. Given:  $\overline{AC}$  is a perpendicular bisector of  $\overline{BD}$ .

Prove:  $\triangle ABE \cong \triangle ADE$

