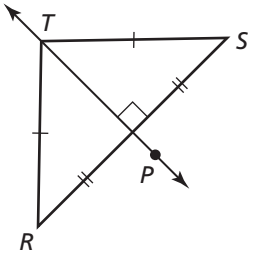
Name_____ Date _____

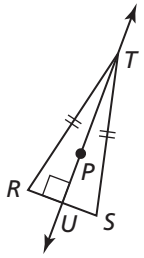
6.2 Practice A

In Exercises 1–3, tell whether the information in the diagram allows you to conclude that point *P* lies on the perpendicular bisector of $\overline{RS}$, or on the angle bisector of $\angle DEF$. Explain your reasoning.

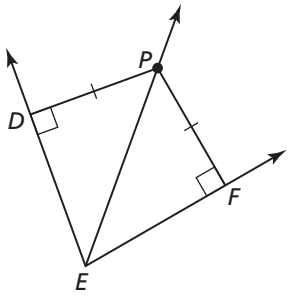
1.



2.

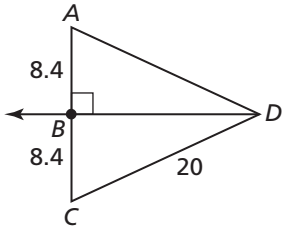


3.

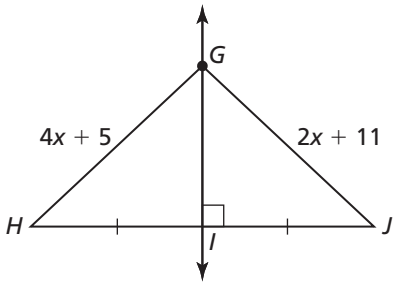


In Exercises 4–7, find the indicated measure. Explain your reasoning.

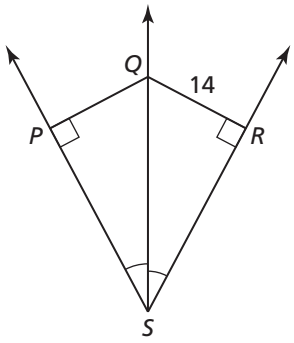
4. AD



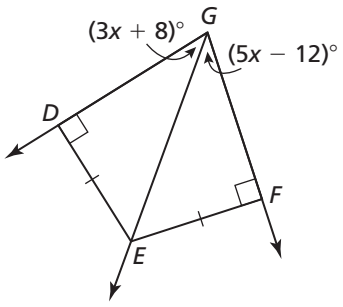
5. GJ



6. PQ



7. $m\angle DGF$



8. Write an equation of the perpendicular bisector of the segment with the endpoints $A(-2, -2)$ and $B(6, 0)$.

9. Explain how you can use the perpendicular bisector of a segment to draw an isosceles triangle.

10. In a right triangle, is it possible for the bisector of the right angle to be the same line as the perpendicular bisector of the hypotenuse? Explain your reasoning. Draw a picture to support your answer.