6.1 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.
6.1 Practice B

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

1. 
2. 
3. 

In Exercises 4–6, find the indicated measure. Explain your reasoning.

4. \( AC \)  
5. \( m\angle LNM \)  
6. \( m\angle UTW \)

7. Write an equation of the perpendicular bisector of the segment with the endpoints \( G(3, 7) \) and \( H(-1, -5) \).

8. In the figure, line \( m \) is the perpendicular bisector of \( \overline{PR} \). Is point \( Q \) on line \( m \)? Is point \( S \) on line \( m \)? Explain your reasoning.

9. You are installing a fountain in the triangular garden pond shown in the figure. You want to place the fountain the same distance from each side of the pond. Describe a way to determine the location of the fountain using angle bisectors.