- 6. If two angles of a triangle are congruent, then the sides opposite those angles are congruent. An equiangular triangle is also equilateral.
- 7. Sometimes you can prove one pair of triangles congruent and then use corresponding parts from those triangles to prove that another pair of triangles are congruent.
- **8.** Proofs in geometry are commonly written in two-column form, as a list of key steps, or in paragraph form.
- 9. Every triangle has three medians and three altitudes.
- 10. The perpendicular bisector of a segment is the line that is perpendicular to the segment at its midpoint.
- 11. A point lies on the perpendicular bisector of a segment if and only if the point is equidistant from the endpoints of the segment.
- 12. A point lies on the bisector of an angle if and only if the point is equidistant from the sides of the angle.

## Chapter Review

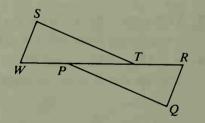
The two triangles shown are congruent. Complete.

1. 
$$\triangle STW \cong \underline{?}$$

2. 
$$\triangle PQR \cong \underline{?}$$

3. 
$$\angle R \cong \underline{?}$$

4. 
$$? = RP$$



4-1

4-3

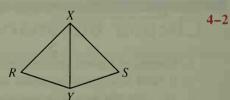
Can you deduce from the given information that  $\triangle RXY \cong \triangle SXY$ ? If so, what postulate can you use?

**5.** Given: 
$$\overline{RX} \cong \overline{SX}$$
;  $\overline{RY} \cong \overline{SY}$ 

**6.** Given: 
$$\overline{RY} \cong \overline{SY}$$
;  $\angle R \cong \angle S$ 

7. Given: 
$$\overline{XY}$$
 bisects  $\angle RXS$  and  $\angle RYS$ .

**8.** Given: 
$$\angle RXY \cong \angle SXY$$
;  $\overline{RX} \cong \overline{SX}$ 



Write proofs in two-column form.

9. Given: 
$$\overline{JM} \cong \overline{LM}$$
;  $\overline{JK} \cong \overline{LK}$   
Prove:  $\angle MJK \cong \angle MLK$ 

10. Given: 
$$\angle JMK \cong \angle LMK$$
;  $\overline{MK} \perp$  plane P  
Prove:  $\overline{JK} \cong \overline{LK}$ 

