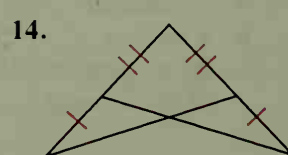
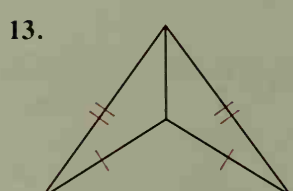
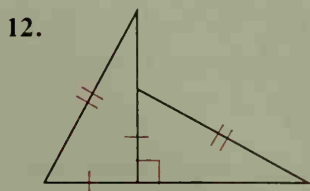
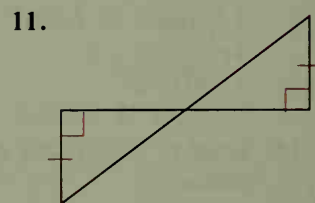
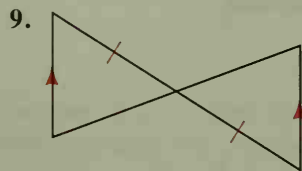


# Chapter Test

Complete.

1. If  $\triangle BAD \cong \triangle TOP$ , then  $\overline{DB} \cong \underline{\hspace{1cm}}$  and  $\triangle PTO \cong \underline{\hspace{1cm}}$ .
2.  $\triangle EFG$  is isosceles, with  $m\angle G = 94$ . The legs are sides  $\underline{\hspace{1cm}}$  and  $\underline{\hspace{1cm}}$ .  
 $m\angle E = \underline{\hspace{1cm}}$  (numerical answer).
3. You want to prove  $\triangle ABC \cong \triangle XYZ$ . You have shown  $\overline{AB} \cong \overline{XY}$  and  $\overline{AC} \cong \overline{XZ}$ . To prove the triangles congruent by SAS you must show that  $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$ . To prove the triangles congruent by SSS you must show that  $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$ .
4. A method that can be used to prove right triangles congruent, but cannot be used with other types of triangles, is the  $\underline{\hspace{1cm}}$  method.
5.  $\triangle CAP$  and  $\triangle TAP$  are equilateral and coplanar.  $\overline{AP}$  is a common side of the two triangles.  $m\angle CAT = \underline{\hspace{1cm}}$  (numerical answer).
6. A segment from a vertex of a triangle to the midpoint of the opposite side is called a(n)  $\underline{\hspace{1cm}}$  of the triangle.
7. A point lies on the bisector of an angle if and only if it is equidistant from  $\underline{\hspace{1cm}}$ .
8. If in  $\triangle ABC$   $m\angle A = 50$ ,  $m\angle C = 80$ ,  $AC = 7x + 8$ , and  $BC = 38 - 3x$ , then  $x = \underline{\hspace{1cm}}$ .

Can two triangles be proved congruent? If so, by which method, SSS, SAS, ASA, AAS, or HL?



$\overline{WX}$  and  $\overline{YZ}$  are perpendicular bisectors of each other.

15.  $W$  is equidistant from  $\underline{\hspace{1cm}}$  and  $\underline{\hspace{1cm}}$ .
16.  $Z$  is equidistant from  $\underline{\hspace{1cm}}$  and  $\underline{\hspace{1cm}}$ .
17. Name four isosceles triangles.
18. How many pairs of congruent triangles are shown in the diagram?

