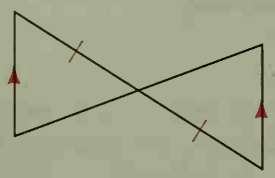
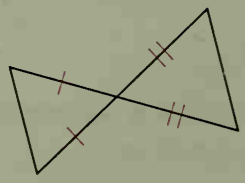
Chapter Test

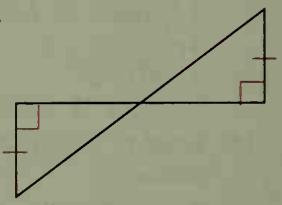
Complete.

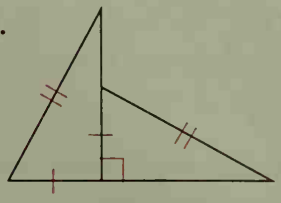
1. If $\triangle BAD \cong \triangle TOP$, then $\overline{DB} \cong$ ___? and $\triangle PTO \cong$ ___?.
2. $\triangle EFG$ is isosceles, with $m\angle G = 94$. The legs are sides ___? and ___?. $m\angle E =$ ___? (numerical answer).
3. You want to prove $\triangle ABC \cong \triangle XYZ$. You have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

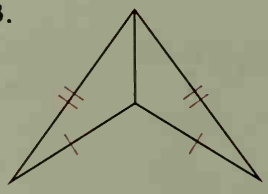
Can two triangles be proved congruent? If so, by which method, SSS, SAS, ASA, AAS, or HL?

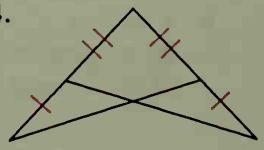
9. 

10. 

11. 

12. 

13. 

14. 

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

15. W is equidistant from ___? and ___?.
16. Z is equidistant from ___? and ___?.
17. Name four isosceles triangles.
18. How many pairs of congruent triangles are shown in the diagram?