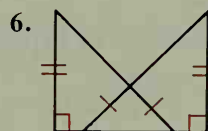
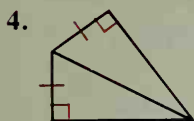
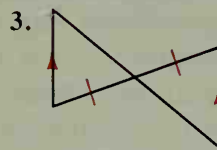
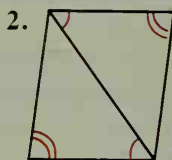
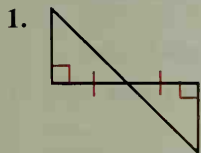


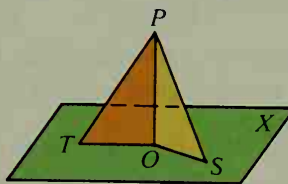
Chapter 4

In Exercises 1–8 write a method (SSS, SAS, ASA, AAS, or HL) that can be used to prove the two triangles congruent.



7. Given: $\overline{PO} \perp$ plane X ; $OT = OS$

8. Given: $\overline{PO} \perp$ plane X ; $PT = PS$



Exs. 7, 8

Indicate the best answer by writing the appropriate letter.

9. In $\triangle RXT$, $\angle R \cong \angle T$, $RT = 2x + 5$, $RX = 5x - 7$, and $TX = 2x + 8$. What is the perimeter of $\triangle RXT$?
 a. 5 b. 15 c. 18 d. 51
10. If $\triangle DEF \cong \triangle PRS$, which of these congruences *must* be true?
 a. $\overline{DF} \cong \overline{PS}$ b. $\overline{EF} \cong \overline{PR}$ c. $\angle E \cong \angle S$ d. $\angle F \cong \angle R$
11. In $\triangle ABC$, $AB = AC$, $m\angle A = 46$, and \overline{BD} is an altitude. What is the measure of $\angle CBD$?
 a. 23 b. 44 c. 67 d. 134
12. An equiangular triangle *cannot* be which of the following?
 a. equilateral b. isosceles c. scalene d. acute
13. Point X is equidistant from vertices T and N of scalene $\triangle TEN$. Point X *must* lie on which of the following?
 a. bisector of $\angle E$ b. perpendicular bisector of \overline{TN}
 c. median to \overline{TN} d. the altitude to \overline{TN}
14. Given: $\overline{AB} \parallel \overline{DC}$; $\overline{AB} \cong \overline{CD}$; $\angle 1 \cong \angle 2$
 To prove that $\overline{DE} \cong \overline{BF}$, what would you prove first?
 a. $\triangle ADE \cong \triangle CBF$ b. $\triangle ABF \cong \triangle CDE$
 c. $\triangle ABC \cong \triangle CDA$ d. cannot be proved

