

Geometry

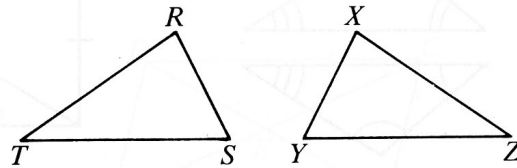
Test 9 Follow-Up: Basics of Congruent Triangles

Goals

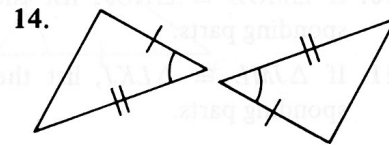
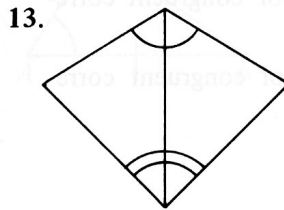
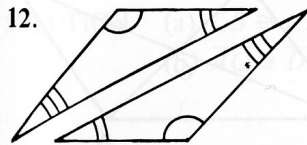
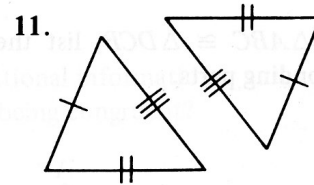
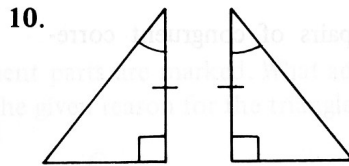
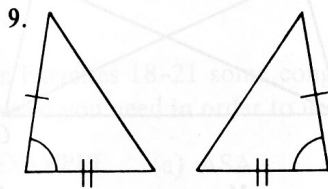
Determine which triangle congruence postulate, if any, can be used to prove two triangles congruent.

If $\triangle RST \cong \triangle XYZ$, complete the statements.

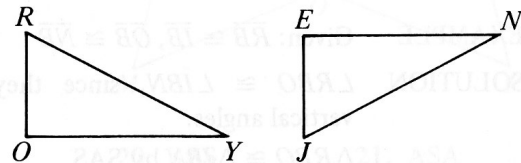
1. $\angle R \cong$?
2. $\overline{RS} \cong$?
3. $\overline{YZ} \cong$?
4. $\angle Y \cong$?
5. $\angle Z \cong$?
6. $\overline{RT} \cong$?
7. $\triangle STR \cong$?
8. $\triangle ZYX \cong$?



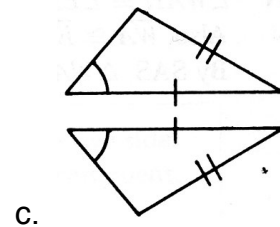
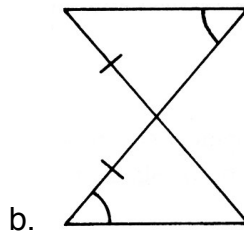
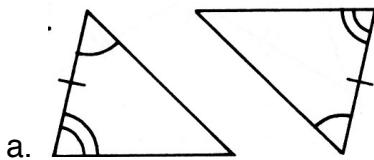
Can you tell from the given information that the two triangles are congruent? If so, give a reason (SSS, SAS, or ASA).



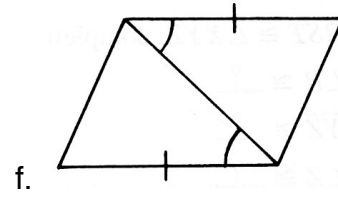
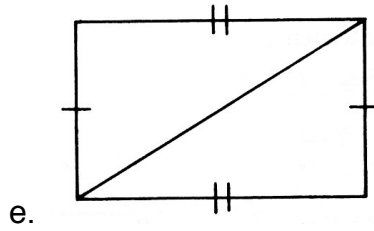
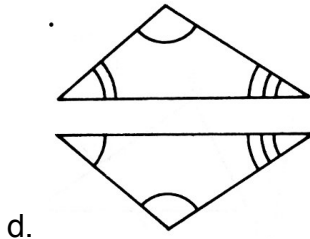
15. If $\triangle ROY \cong \triangle JEN$, list the three pairs of congruent angles and the three pairs of congruent sides.



16. Determine which of the following pairs of triangles can be proved congruent. If they can be proved congruent, state the appropriate congruence postulate and MARK the drawing to show the correspondence.



Test 9 Follow-Up: Basics of Proving Triangles Congruent



17. In the chart below, create your own problem like number 16. There should be at least one problem for each of the congruence postulates (SSS, SAS, ASA, AAS) and one that can not be proved congruent. Also, at least one of the problems should require the use of the base angles of isosceles triangle being congruent and at least one should require the use of parallel lines. These problems may be used with the rest of the class. Include answers!
