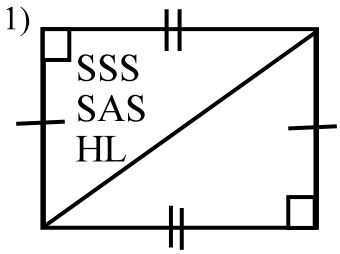
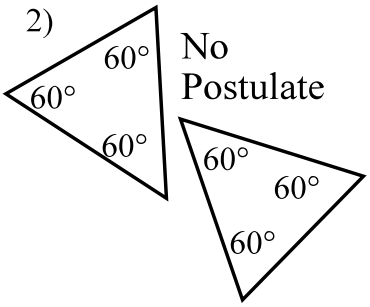
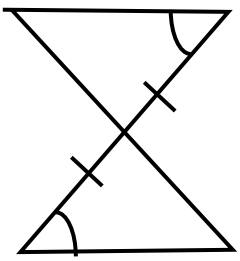
KEY

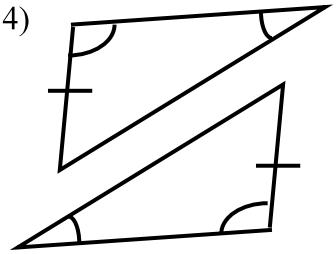
Triangle Congruence Postulates 3
Geometry

If the triangles are congruent, name the postulate(s) that prove it.

1) 

2) 

3) 
ASA

4) 
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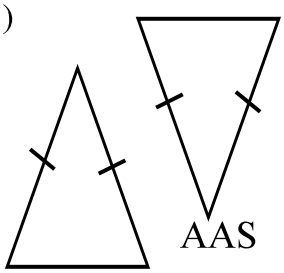
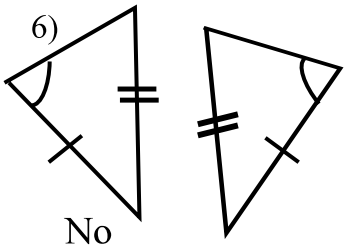
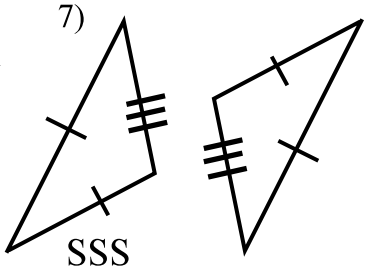
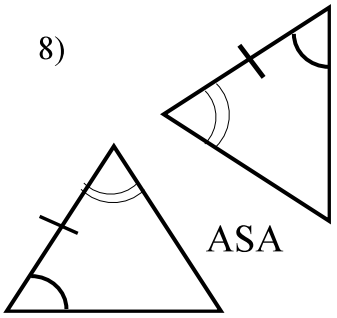
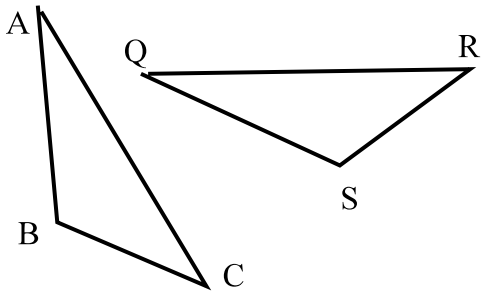
5) 
AAS

6) 
No
Postulate

7) 
SSS

8) 
ASA

We want to know if ΔABC ≅ ΔQSR.



9) We know that ∠B ≅ ∠S. What other information would make it possible to use ASA? $\overline{BC} \cong \overline{SR}$, $\angle C \cong \angle R$

10) We know that $\overline{SR} \cong \overline{BC}$. What other information would make it possible to use SSS? $\overline{CA} \cong \overline{RQ}$, $\overline{AB} \cong \overline{QS}$

11) We know that $\overline{AC} \cong \overline{QR}$. What other information would make it possible to use SAS?
$\angle A \cong \angle Q$, $\overline{AB} \cong \overline{QS}$

Use congruence markings to show the congruent parts in each triangle, then fill in the blanks.

12) ΔYVX is isosceles
$\overline{YX} \perp \overline{VZ}$

13) $\overline{SU}$ is the angle bisector of ∠RUT
$\overline{RU} \cong \overline{TU}$.

14) ΔCDF is equilateral
E is the midpoint of $\overline{DF}$

ΔVXZ ≅ ΔVYZ by HL. ΔRSU ≅ ΔTSU by SAS. ΔDEC ≅ ΔFEC by SSS