Triangle Congruence Postulates 2
Geometry

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

1)

SAS

2)

60°

60°

No Postulate

3)

SSS

4)

ASA

5)

No Postulate

6)

AAS

7)

90°
90°

SAS

8)

SSS
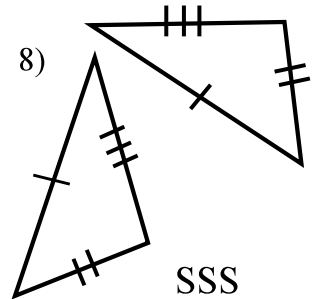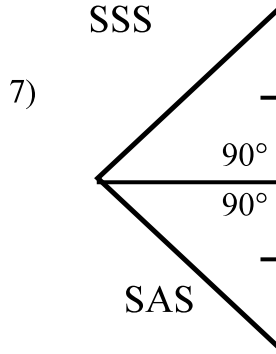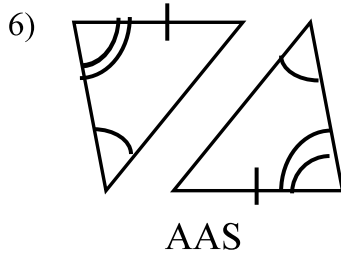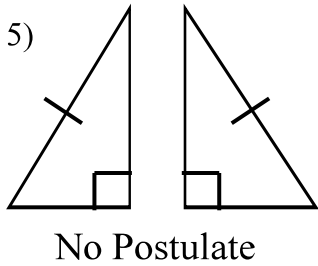
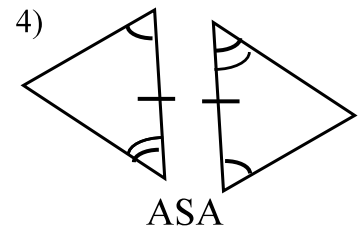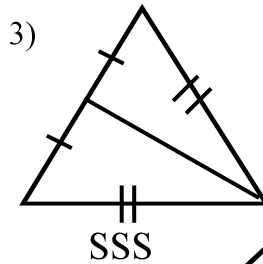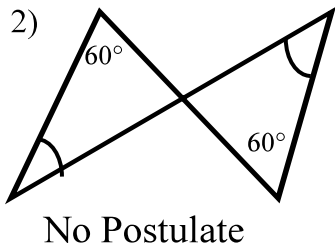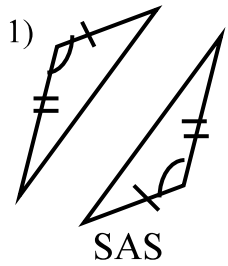We want to know if ΔEFG ≅ ΔTVU.

9) We know that ∠G ≅ ∠U. What other information would make it possible to use SAS? $\overline{FG} \cong \overline{TU}$ and $\overline{EG} \cong \overline{VU}$

10) We know that $\overline{EF} \cong \overline{VT}$. What other information would make it possible to use ASA? $\angle E \cong \angle V$ and $\angle F \cong \angle T$

11) We know that $\overline{GE} \cong \overline{UV}$. What other information would make it possible to use SSS? $\overline{FE} \cong \overline{TV}$ $\overline{FG} \cong \overline{TU}$

E
U
F
T
G
V
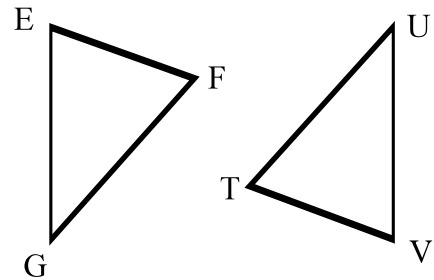
Use congruence markings to show the congruent parts in each triangle, then fill in the blanks.

12) B is the midpoint of $\overline{AC}$.
∠E ≅ ∠D, and ∠A ≅ ∠DBC.
ΔEAB ≅ ΔDBC by AAS.

13) $\overline{SV} \cong \overline{SW}$, $\overline{RV} \cong \overline{TW}$
∠V ≅ ∠W.
ΔVSR ≅ ΔWST by SAS.

14) ∠K ≅ ∠M, L is the midpoint of $\overline{KM}$.
ΔLJK ≅ ΔLNM by ASA.

D
C
E
B
A

V
W
R
S
T

J
M
L
K
N