Are the two triangles congruent? Explain how you know.

1.

2.

3.

4.

5.

6.

△RST and △TUR
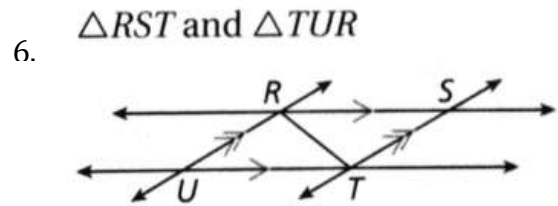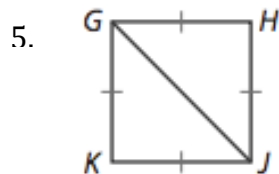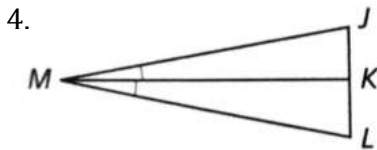
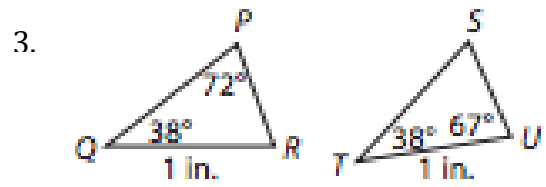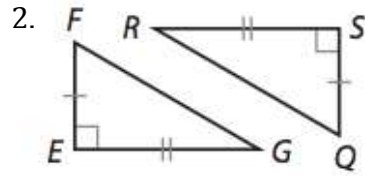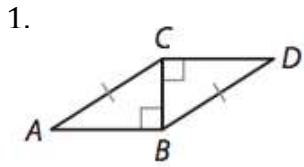7. Which of the following are reasons that justify why the triangles are congruent? Select all that apply.
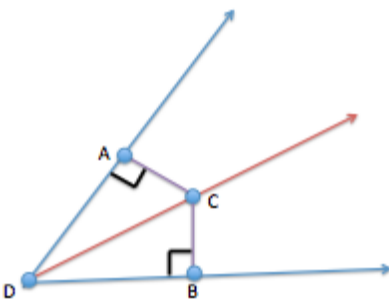
A. SSA Triangle Congruence Theorem

B. SAS Triangle Congruence Theorem

C. ASA Triangle Congruence Theorem
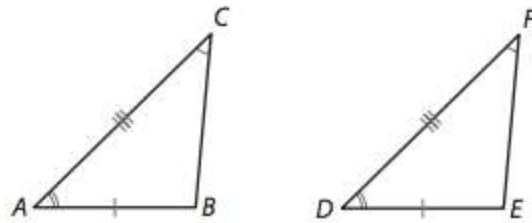
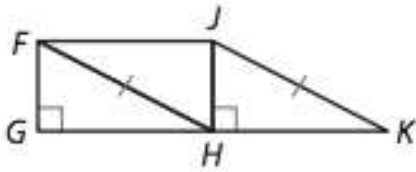8. What does CPCTC stand for? What do we use it for in proofs?

9. Given: $\overline{DC}$ bisects $\angle ADB$
Prove: $\overline{AC} \cong \overline{BC}$
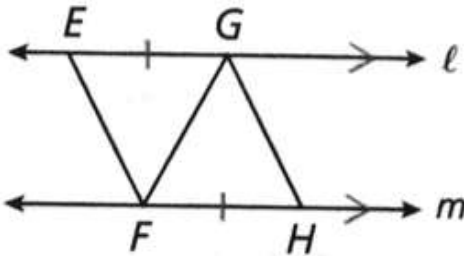
Write a paragraph proof.

Write a two column proof.

10. Given: ∠FGH and ∠JHK are right angles.
H is the midpoint of $\overline{GK}$. $\overline{FH} \cong \overline{JK}$
Prove: △FGH ≅ △JHK

Write a flow chart proof.

11. Given: ℓ || m, $\overline{EG} \cong \overline{HF}$
Prove: △EGF ≅ △HFG

Write a two column proof.

12. Given: $\overline{AB} \cong \overline{DC}$, ∠ABC ≅ ∠DCB
Prove: ∠A ≅ ∠D
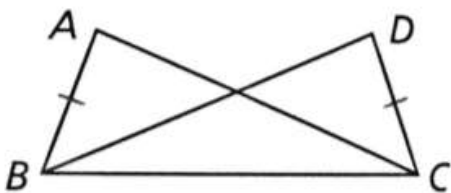
Challenge!

Given: $\overline{RU} \cong \overline{TV}$, $\overline{RS} \cong \overline{TS}$

Write a paragraph proof.

Prove: $\overline{RV} \cong \overline{TU}$