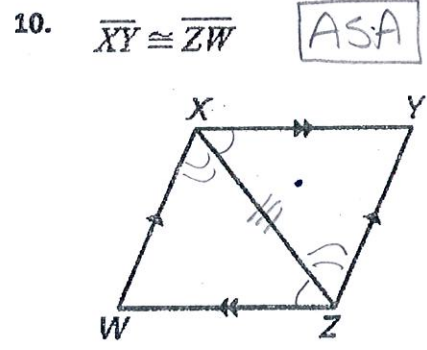
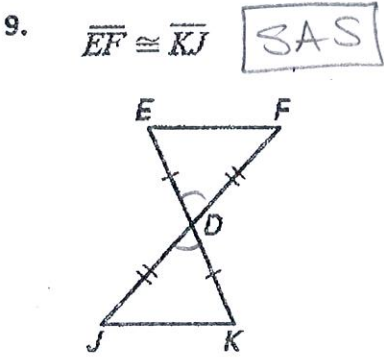
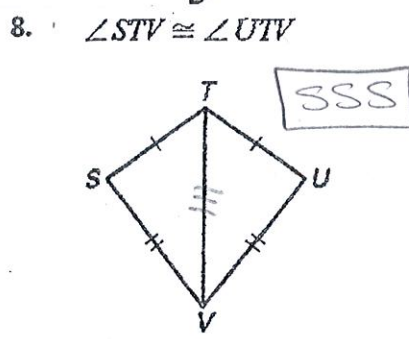
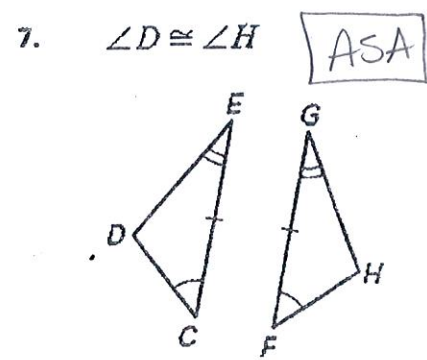
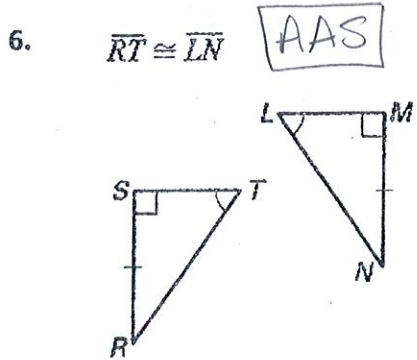
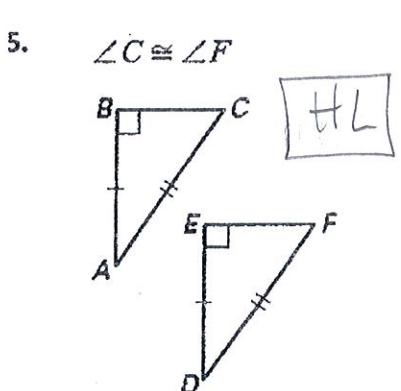


4.6 (CPCTC) Worksheet

1. What does CPCTC stand for? Corresponding parts of congruent triangles are congruent
2. What must you show in your prove BEFORE using CPCTC? 2 triangles are congruent
3. What do you use CPCTC for in a proof? It can prove 2 sides or 2 angles are congruent

Tell how the triangles are congruent (SSS, SAS, ASA, AAS, or HL) if you want to state the given segments or angles congruent. BE CAREFUL... YOU DON'T USE THOSE GIVEN SEGMENTS OR ANGLES TO HELP GET YOUR ANSWER!!!



Match each statement to its correct congruency method at the right.

- E 11. Right triangles that have a pair of hypotenuses and a pair of legs congruent.
- B 12. Triangles that have 2 pairs of sides congruent and 1 pair of included angles congruent.
- D 13. Triangles that have 2 pairs of angles congruent and 1 pair of non-included sides congruent.
- A 14. Triangles that have 3 pairs of sides congruent.
- C 15. Triangles that have 2 pairs of angles congruent and 1 pair of included sides congruent.

- A. SSS

B. SAS

C. ASA

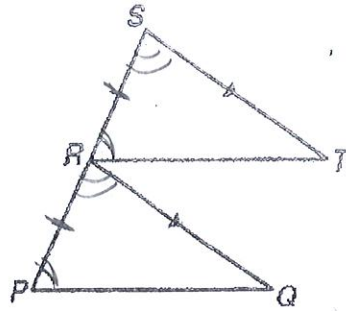
D. AAS

E. HL

Complete each proof.

16. Given: $\overline{ST} \parallel \overline{RQ}$, $\overline{SR} \cong \overline{RP}$, $\angle SRT \cong \angle RPQ$

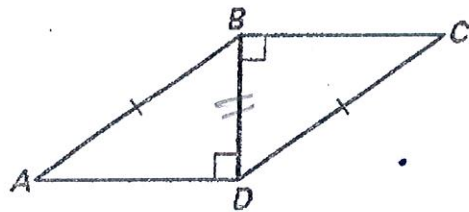
Prove: $\overline{RT} \cong \overline{PQ}$



Statements	Reasons
1. $\overline{ST} \parallel \overline{RQ}$, $\overline{SR} \cong \overline{RP}$, $\angle SRT \cong \angle RPQ$	1. Given
2. $\angle RST \cong \angle RPQ$	2. Corresponding angles
3. $\triangle RST \cong \triangle RPQ$	3. ASA
4. $\overline{RT} \cong \overline{PQ}$	4. CPCTC

17. Given: $\overline{AB} \cong \overline{CD}$, $\angle ADB$ and $\angle DBC$ are right angles

Prove: $\angle ABD \cong \angle CDB$



Statements	Reasons
1. $\overline{AB} \cong \overline{CD}$, $\angle ADB$ and $\angle DBC$ are right angles	1. Given
2. $\overline{BD} \cong \overline{BD}$	2. Reflexive
3. $\triangle ABD \cong \triangle CDB$	3. HL
4. $\angle ABD \cong \angle CDB$	4. CPCTC