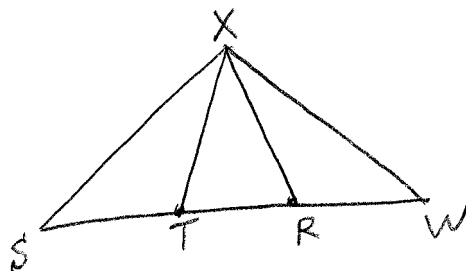


Mr. Hansen
Geom. HW due 10/2/08
[excerpt]

§3.3 #4

4. Given: T, R tris. $\overline{SW}$
 $\overline{XS} \cong \overline{XW}$

Prove: $\overline{XT} \cong \overline{XR}$



1. T, R tris. $\overline{SW}$

2. $\overline{ST} \cong \overline{RW}$

3. $\angle S \cong \angle W$

4. $\overline{XS} \cong \overline{XW}$

5. $\triangle TSX \cong \triangle RWX$

6. $\overline{XT} \cong \overline{XR}$

1. G

2. Def. tris.

3. G

4. G

5. SAS (2, 3, 4)

6. CPCTC



Note:

- In step 5, be sure to identify the steps (2, 3, and 4) that justify the congruent pairs of sides, angles, and sides.
- CPCTC is never a reason that 2 triangles are $\cong$. (That is a common student error.) Instead, CPCTC is a reason that you give for why a pair of segments or angles must be congruent. CPCTC occurs on the line after you have proved 2 triangles congruent.