4-4 Using CPCTC

Name:_____ Date: Per:

Warm-up

If $\triangle SAY \cong \triangle NOW$, which angle is congruent to $\angle S$?

 \triangle $\angle Y$

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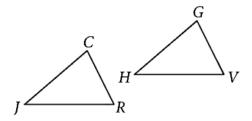
 \bigcirc $\angle W$

 \bigcirc $\angle N$

What other parts are congruent?

In the diagram, $\triangle JRC \cong \triangle HVG$.

- 1. List the congruent corresponding angles.
- 2. List the congruent corresponding sides.

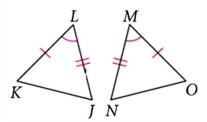


You are given that $\triangle TIC \cong \triangle LOK$.

- 3. List the congruent corresponding angles.
- 4. List the congruent corresponding sides.

Notes:

5. Developing Proof State why the two triangles are congruent. Give the congruence statement. Then list all the other parts of the triangles that are congruent by CPCTC.



Using CPCTC

Writing a Proof with CPCTC

Given: $\angle Q \cong \angle R$,

 $\angle QPS \cong \angle RSP$

Prove: $\overline{SQ} \cong \overline{PR}$

P

Statements

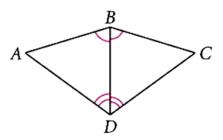
Reasons

7.

Given: $\angle ABD \cong \angle CBD$,

 $\angle BDA \cong \angle BDC$

Prove: $\overline{AB} \cong \overline{CB}$



Statements

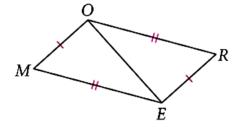
Reasons

Writing a Proof with **CPCTC**

8.

Given: $\overline{\frac{OM}{ME}} \cong \overline{\frac{ER}{RO}}$,

Prove: $\angle M \cong \angle R$



Statements

Reasons

Writing a Proof with **CPCTC**

If $\triangle ABC \cong \triangle XYZ$, by which theorem or postulate is $\overline{CB} \cong \overline{ZY}$?

A CPCTC

C Parallel Postulate

B SAS

D Isosceles Triangle Theorem