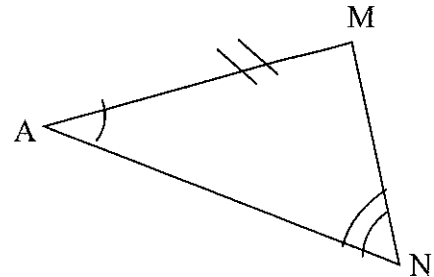
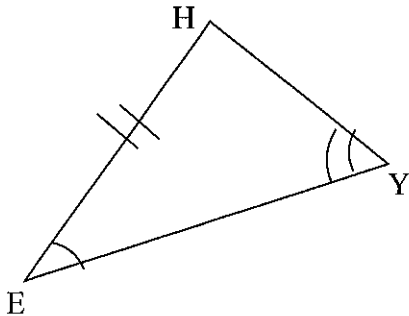


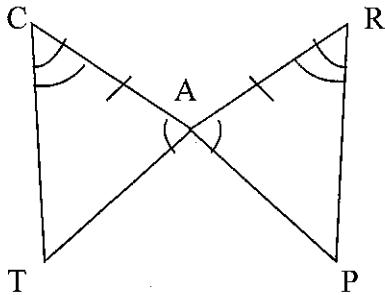
#1: $\triangle HEY$ is congruent to $\triangle MAN$ by AAS.

What **other** parts of the triangles are congruent by CPCTC?

$$\begin{array}{l} \underline{EY} \cong \underline{AN} \\ \underline{\angle H} \cong \underline{\angle M} \\ \underline{HY} \cong \underline{MN} \end{array}$$



#2:



$\triangle CAT \cong \triangle RAP$, by ASA

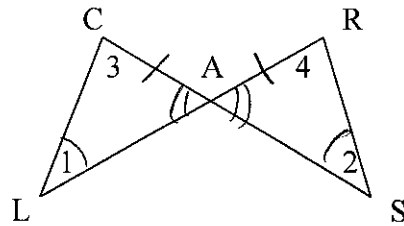
THEREFORE:

$$\begin{array}{l} \underline{\angle T} \cong \underline{\angle P}, \text{ by CPCTC} \\ \underline{CT} \cong \underline{RP}, \text{ by CPCTC} \\ \underline{AT} \cong \underline{AP}, \text{ by CPCTC} \end{array}$$

#3:

Given: $\overline{AC} \cong \overline{AR}$ and $\angle 1 \cong \angle 2$

Prove: $\angle 3 \cong \angle 4$



Proof:

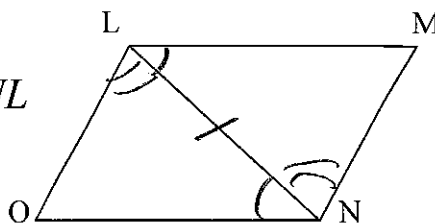
1. $\overline{AC} \cong \overline{AR}$
2. $\underline{\angle 1 \cong \angle 2}$
3. $\underline{\angle CAL \cong \angle RAS}$
4. $\underline{\triangle LCA \cong \triangle RSA}$
5. $\underline{\angle 3 \cong \angle 4}$

1. Given
2. Given vertical \angle s
3. ~~Reflexive Property~~
4. AAS \cong Postulate
5. CPCTC

#4:

Given: $\angle NLM \cong \angle LNO$ and $\angle OLN \cong \angle MNL$

Prove: $\angle M \cong \angle O$



Proof:

1. $\angle NLM \cong \angle LNO$

2. $\angle OLN \cong \angle MNL$

3. $\overline{LN} \cong \overline{NL}$

4. $\triangle LMN \cong \triangle NOL$

5. $\angle M \cong \angle O$

1. Given

2. Given

3. Reflexive Property of \cong

4. ASA Congruence Postulate

5. CPCTL

#5

Given: $\overline{AC} \cong \overline{BC}$ and $\overline{AX} \cong \overline{BX}$

Prove: $\angle 1 \cong \angle 2$

Proof:

1. $\overline{AC} \cong \overline{BC}, \overline{AX} \cong \overline{BX}$

2. $\overline{XC} \cong \overline{XC}$

3. $\triangle AXC \cong \triangle BXC$

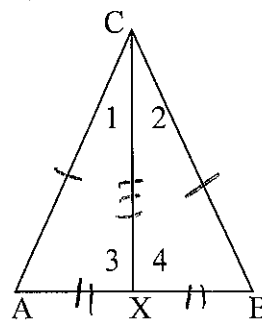
4. $\angle 1 \cong \angle 2$

1. Given

2. Reflexive Prop. of Congruence

3. SSS Congruence Postulate

4. CPCTL



#6

Given: $\angle 1 \cong \angle 2$ and $\angle 3 \cong \angle 4$

Prove: $\overline{XY} \cong \overline{ZW}$

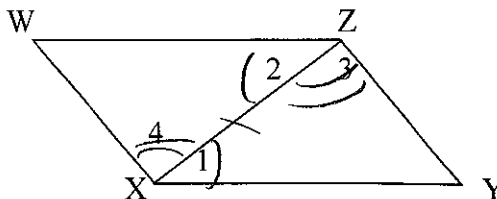
Proof:

1. $\angle 1 \cong \angle 2, \angle 3 \cong \angle 4$

2. $\overline{XZ} \cong \overline{XZ}$

3. $\triangle XWZ \cong \triangle ZYX$

4. $\overline{XY} \cong \overline{ZW}$



1. Given

2. Reflexive Property

3. ASA Congruence Postulate

4. CPCTL