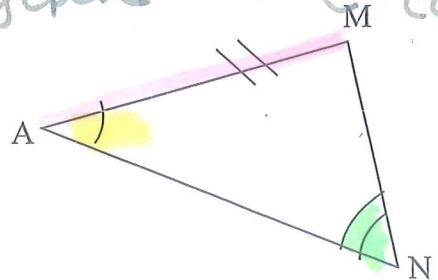
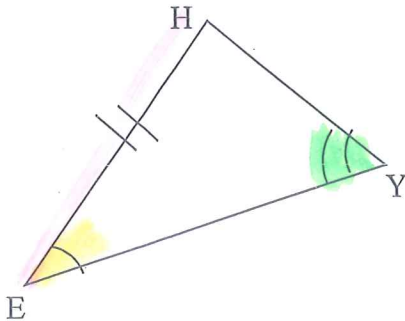


#1:  $\triangle HEY$  is congruent to  $\triangle MAN$  by AAS.

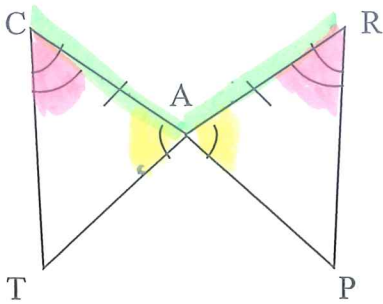
What other parts of the triangles are congruent by CPCTC?

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

C-corresponding  
P-parts  
of  
C-congruent  
T-Triangles  
are  
C-congruent



#2:



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

THEREFORE:

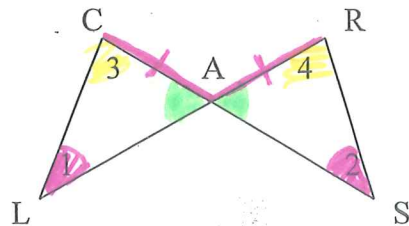
$$\begin{array}{l} \underline{\angle T} \cong \underline{\angle P} \text{, by CPCTC} \\ \underline{CT} \cong \underline{RP} \text{, by CPCTC} \\ \underline{AT} \cong \underline{AP} \text{, by CPCTC} \end{array}$$

$\cong \triangle$

#3:

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

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



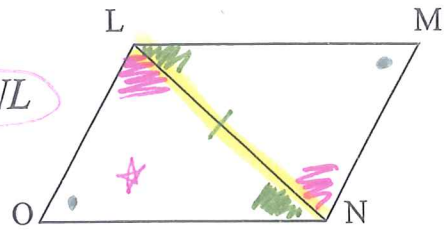
Proof:

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

1. Given
2. Given
3. vertical  $\angle$ s are  $\cong$
4. AAS
5. cpctc

#4:

Given:  $\angle NLM \cong \angle LNO$  and  $\angle OLN \cong \angle MNL$   
 Prove:  $\angle M \cong \angle O$



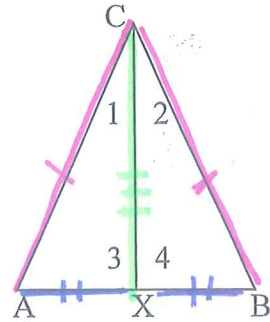
Proof:

1.  $\angle NLM \cong \angle LNO$
2.  $\angle OLN \cong \angle MNL$
3.  $LN \cong LN$
4.  $\triangle LMN \cong \triangle NOL$
5.  $\angle M \cong \angle O$

1. Given
2. Given
3. Reflexive Property of  $\cong$
4. ASA
5. cpctc

#5

Given:  $\overline{AC} \cong \overline{BC}$  and  $\overline{AX} \cong \overline{BX}$   
 Prove:  $\angle 1 \cong \angle 2$



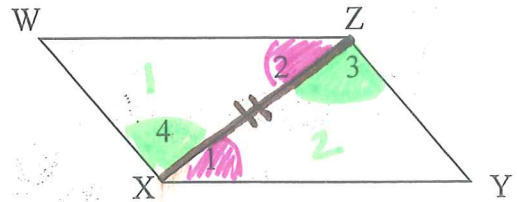
Proof:

1.  $\overline{AC} \cong \overline{BC}, \overline{AX} \cong \overline{BX}$
2.  $\overline{CX} \cong \overline{CX}$
3.  $\triangle AXC \cong \triangle BXC$
4.  $\angle 1 \cong \angle 2$

1. Given
2. Reflexive Prop. of Congruence
3. SSS
4. cpctc

#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
3. ASA
4. cpctc