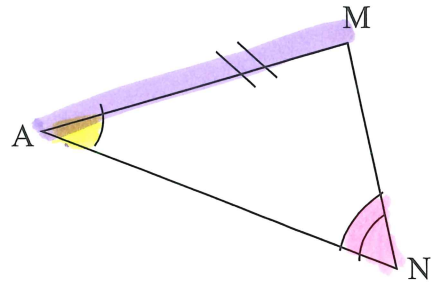
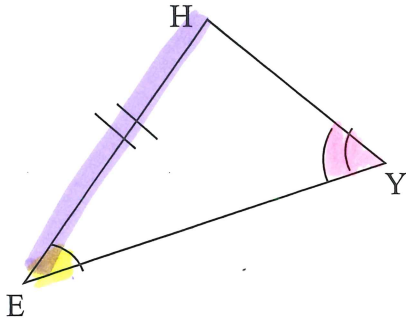


#1: $\triangle HEY$ is congruent to $\triangle MAN$ by AAS.

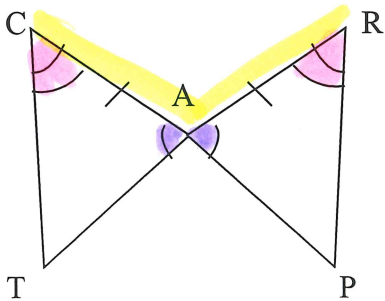
What other parts of the triangles are congruent by CPCTC?

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



#2:

On your own



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

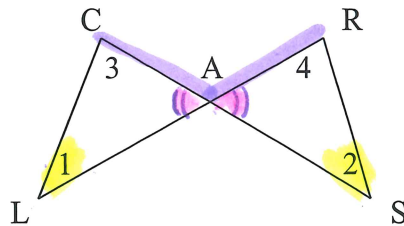
THEREFORE:

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

#3:

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

$\angle 3 \cong \angle 4$ need to prove \cong As first!



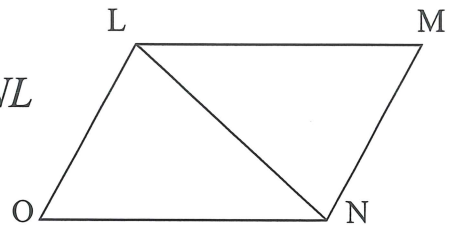
Proof:

1. $\overline{AC} \cong \overline{AR}$
2. $\angle 1 \cong \angle 2$
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: $\angle M \cong \angle O$

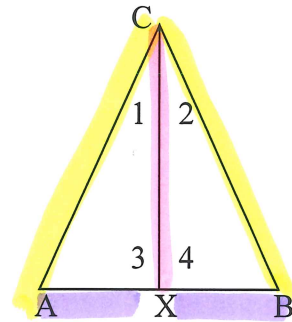


Proof:

- | | |
|--|----------------------------------|
| 1. $\angle NLM \cong \angle LNO$ | 1. _____ |
| 2. _____ | 2. Given |
| 3. _____ | 3. Reflexive Property of \cong |
| 4. $\triangle LMN \cong \triangle$ _____ | 4. _____ |
| 5. _____ | 5. _____ |

#5

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

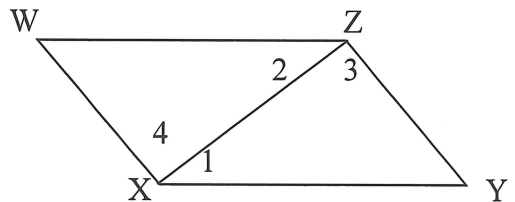


Proof:

- | | |
|---|----------------------------------|
| 1. <u>$AC \cong BC$ and $AX \cong BX$</u> | 1. Given |
| 2. <u>$CX \cong CX$</u> | 2. Reflexive Prop. of Congruence |
| 3. <u>$\triangle AXC \cong \triangle BXC$</u> | 3. <u>SSS</u> |
| 4. <u>$\angle 1 \cong \angle 2$</u> | 4. <u>CPCCTC</u> |

#6

Given: $\angle 1 \cong \angle 2$ and $\angle 3 \cong \angle 4$
 Prove: $\overline{XY} \cong \overline{ZW}$



Proof:

- | | |
|--|----------|
| 1. _____ | 1. Given |
| 2. $\overline{XZ} \cong \overline{XZ}$ | 2. _____ |
| 3. $\triangle XWZ \cong$ _____ | 3. _____ |
| 4. _____ | 4. _____ |