

$$\triangle ABC \cong \triangle WQK$$

$$\angle A \cong W$$

$$\angle Q \cong B$$

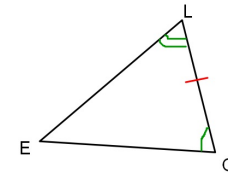
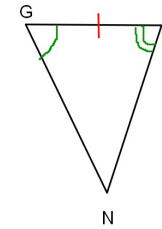
$$\overline{BC} \cong QK$$

$$\overline{KW} \cong CA$$

Section 4-4:

CPCTC

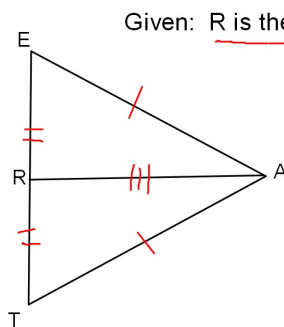
Corresponding Parts of Congruent Triangles are Congruent.



Why is $\overline{RN} \cong \overline{LE}$?

CPCTC

Because $\triangle GNR \cong \triangle LOE$
 $\therefore \overline{RN} \cong \overline{LE}$ are
 corresp. parts



Given: R is the midpoint of ET

Why is $\angle E \cong \angle T$ \rightarrow CPCTC

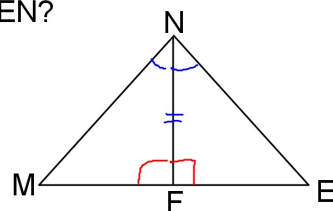
B/c $\triangle AER \cong \triangle ATR$
 By SSS

To prove two segments or two angles are congruent:

- First prove two triangles are congruent
- Second use CPCTC to show that corresponding sides or angles are congruent.

Given: \overline{NF} is \perp to \overline{ME} and \overline{FN} bisects $\angle MNE$

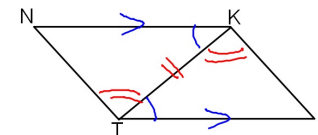
How could you prove that $\overline{MN} \cong \overline{EN}$?



By ASA
 $\triangle MNF \cong \triangle ENF$
 $\therefore \overline{MN} \cong \overline{EN}$ are CPCTC

Given: $\overline{NK} \parallel \overline{ET}$ and $\angle NTK \cong \angle EKT$

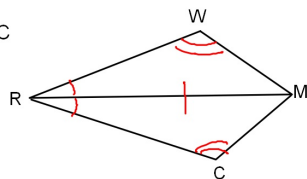
Prove: $\overline{NT} \cong \overline{EK}$



Statement	Reason
1. $\overline{NK} \parallel \overline{ET}$ and $\angle NTK \cong \angle EKT$	1. Given
2. $\overline{KT} \cong \overline{KT}$	2. Reflexive
3. $\angle NKT \cong \angle ETK$	3. ALT INT \angle 's
4. $\triangle NTK \cong \triangle EKT$	4. ASA
5. $\overline{NT} \cong \overline{EK}$	5. CPCTC

Given: \overline{MR} bisects $\angle WRC$ and $\angle W \cong \angle C$

Prove: $\overline{WM} \cong \overline{CM}$



Statement	Reason
1. \overline{MR} bisects $\angle WRC$ and $\angle W \cong \angle C$	1. Given
2. $\overline{RM} \cong \overline{RM}$	2. Reflexive
3. $\angle WRM \cong \angle CRM$	3. def of bisect
4. $\triangle RCM \cong \triangle RWM$	4. AAS
5. $\overline{WM} \cong \overline{CM}$	5. CPCTC