

4.6 pg 259 #3-8, 10, 11, 23

3) $\triangle ABC \cong \triangle DBC$ by SSS
to show $\angle A \cong \angle D$

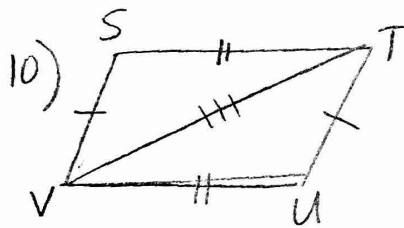
4) $\triangle RQP \cong \triangle STP$ by SAS
to show $\angle Q \cong \angle T$

5) $\triangle JMK \cong \triangle LMK$ by HL
to show $\overline{JM} \cong \overline{LM}$

6) $\triangle ACD \cong \triangle DBA$ by AAS
to show $\overline{AC} \cong \overline{BD}$

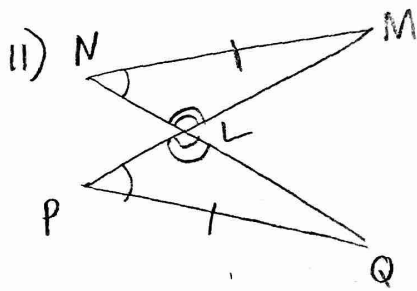
7) $\triangle JNH \cong \triangle KLG$ by AAS
to show $\overline{JK} \cong \overline{HJ}$

8) $\triangle WVQ \cong \triangle TRS$ by AAS
to show $\overline{QW} \cong \overline{TV}$



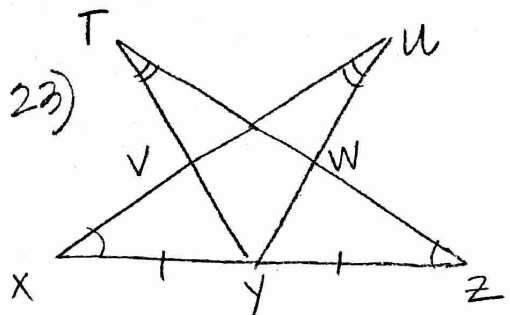
Prove: $\angle S \cong \angle U$

Statements	Reasons
① $\overline{SV} \cong \overline{UT}, \overline{VT} \cong \overline{TV}$	① Given
② $\overline{VT} \cong \overline{TV}$	② Reflexive Prop of \cong
③ $\triangle VST \cong \triangle TVU$	③ SSS
④ $\angle S \cong \angle U$	④ CPCTC

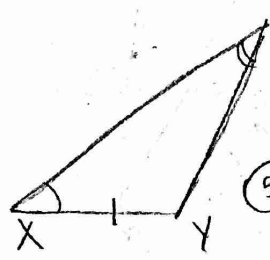
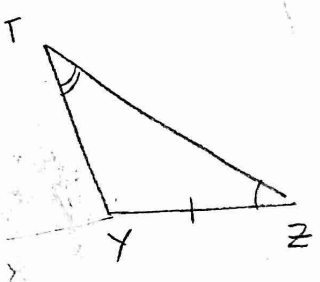


Prove: $\overline{LM} \cong \overline{LQ}$

Statements	Reasons
① $\overline{NL} \cong \overline{PL}$ $\angle N \cong \angle P$	① Given
② $\angle NLM \cong \angle PLQ$	② Vertical \angle 's \cong Thm
③ $\triangle NLM \cong \triangle PLQ$	③ AAS
④ $\overline{LM} \cong \overline{LQ}$	④ CPCTC



Prove: $\angle VYX \cong \angle WYZ$



- | Statements | Reasons |
|---|---------------------------|
| ① $\angle T \cong \angle U$
$\angle X \cong \angle Z$
$\overline{XY} \cong \overline{ZY}$ | ① Given |
| ② $\triangle TYZ \cong \triangle UYX$ | ② AAS |
| ③ $\angle VYX \cong \angle Z + \angle T$
$\angle WYZ \cong \angle X + \angle U$ | ③ Exterior \angle thm |
| ④ $\angle VYX \cong \angle Z + \angle T$
$\angle WYZ \cong \angle Z + \angle T$ | ④ Substitution |
| ⑤ $\angle VYX \cong \angle WYZ$ | ⑤ Transitive/substitution |