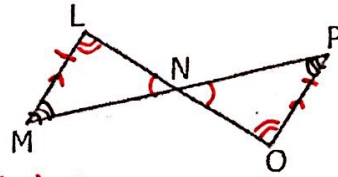


Triangle Congruence Proofs

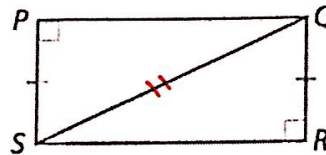
Given: $\overline{ML} \parallel \overline{OP}$; $\overline{ML} \cong \overline{OP}$
 Prove: $\triangle MLN \cong \triangle PON$



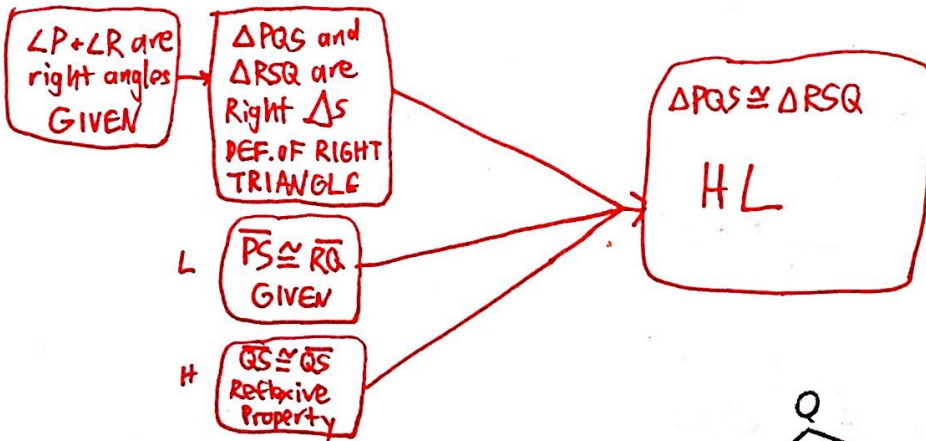
Write a Paragraph Proof!

Since $\overline{ML} \parallel \overline{OP}$, $\angle L \cong \angle O$ by the Alternate Interior Angles Theorem. $\angle LNM \cong \angle ONP$ by the Vertical Angles Theorem. $\overline{ML} \cong \overline{OP}$ because it was given. Thus, $\triangle MLN \cong \triangle PON$ by AAS. \square
 or ASA

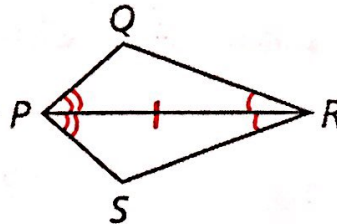
Given: $\angle P$ and $\angle R$ are right angles. $\overline{PS} \cong \overline{RQ}$
 Prove: $\triangle PQS \cong \triangle RSQ$



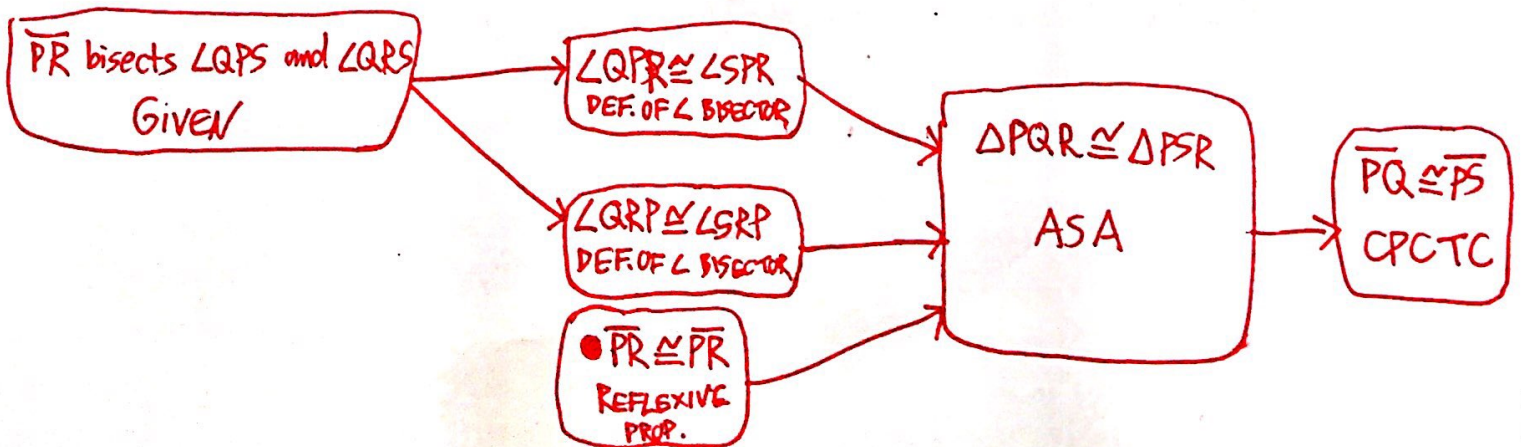
Write a Flowchart Proof!



Given: \overline{PR} bisects $\angle QPS$ and $\angle QRS$.
 Prove: $\overline{PQ} \cong \overline{PS}$

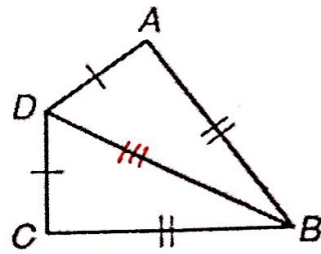


Write a Flowchart Proof!



Given: $\overline{AD} \cong \overline{CD}$, $\overline{AB} \cong \overline{CB}$

Prove: $\angle A \cong \angle C$

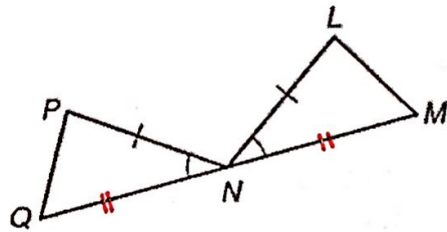


Write a Two Column Proof!

	STATEMENTS	REASONS
S	1) $\overline{AD} \cong \overline{CD}$	Given
S	2) $\overline{AB} \cong \overline{CB}$	Given
S	3) $\overline{DB} \cong \overline{DB}$	Reflexive Property
	4) $\triangle ADB \cong \triangle CDB$	SSS
	5) $\angle A \cong \angle C$	CPC TC

Given: $\angle PNQ \cong \angle LNM$, $\overline{PN} \cong \overline{LN}$,
N is the midpoint of \overline{QM} .

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



Write a Two Column Proof!

	STATEMENTS	REASONS
	1) $\angle PNQ \cong \angle LNM$	Given
	2) $\overline{PN} \cong \overline{LN}$	Given
	3) N is the midpoint of \overline{QM}	Given
	4) $\overline{QN} \cong \overline{MN}$	Definition of midpoint
	5) $\triangle PQN \cong \triangle LMN$	SAS
	6) $\overline{PQ} \cong \overline{LM}$	CPC TC