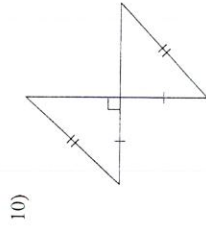
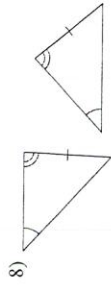
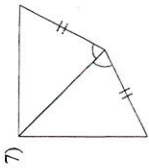
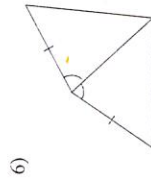
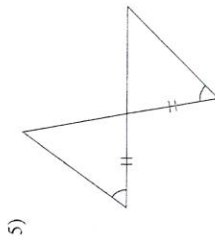
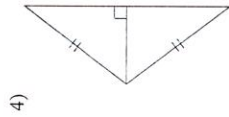
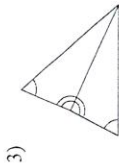
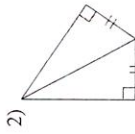
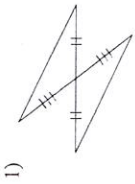


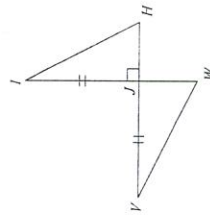
### Triangle Congruences

State if the two triangles are congruent. If they are, state how you know.



State what additional information is required in order to know that the triangles are congruent for the reason given.

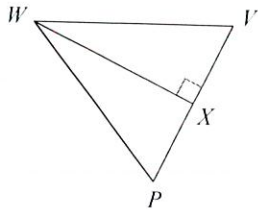
11) HL



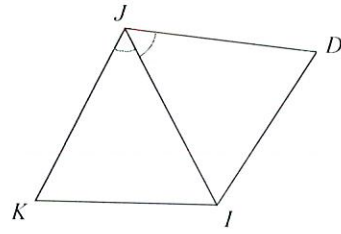
12) ASA



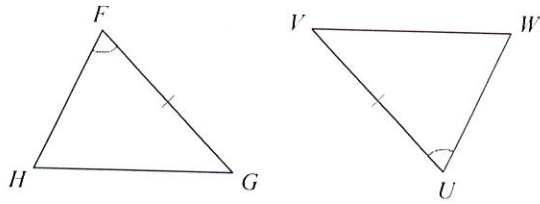
13) HL



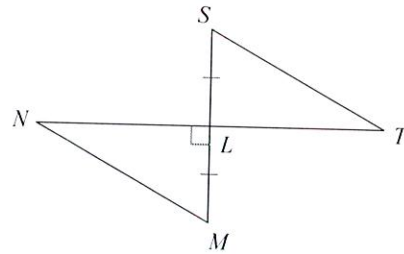
14) SAS



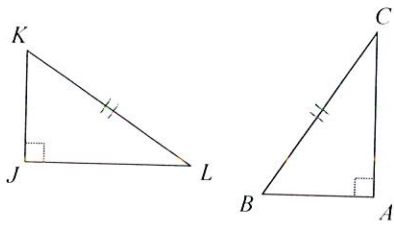
15) ASA



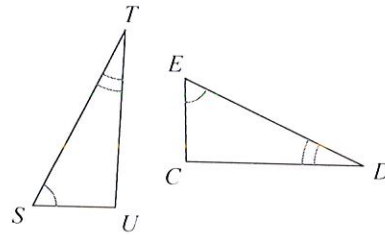
16) HL



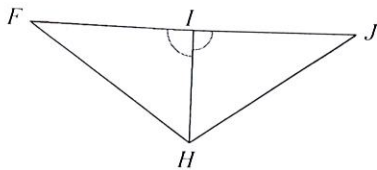
17) HL



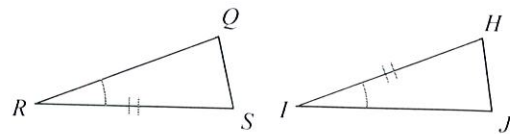
18) ASA



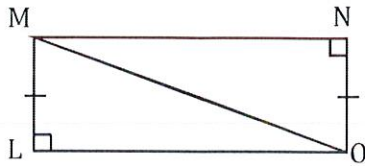
19) ASA



20) AAS



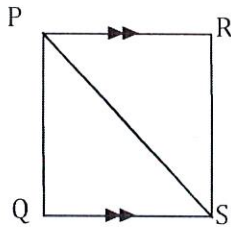
31. Given:  $\overline{LM} \cong \overline{NO}$



Prove:  $\triangle LMO \cong \triangle NOM$

Statements	Reasons
1. $\overline{LM} \cong \overline{NO}$	1.
2.	2.
3.	3.

33. Given:  $\overline{PR} \parallel \overline{QS}$ ,  $\angle QPS \cong \angle RSP$

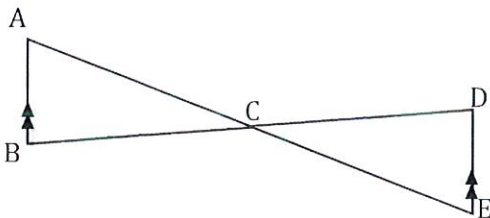


Prove:  $\triangle PQS \cong \triangle SRP$

Statements	Reasons
1. $\overline{PR} \parallel \overline{QS}$	1.
2. $\angle QPS \cong \angle RSP$	2.
3. $\angle PSQ \cong \angle SPR$	3. Alternate Interior
4.	4. Reflexive Property
5. $\triangle PQS \cong \triangle SRP$	5.

35.

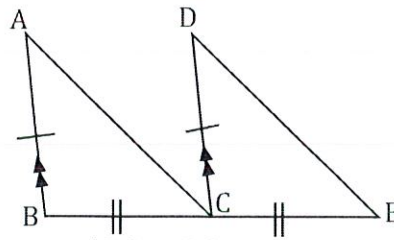
Given:  $\overline{AE}$  bisects  $\overline{BD}$ ,  $\overline{AB} \parallel \overline{DE}$



Prove:  $\triangle ABC \cong \triangle DEC$

Statements	Reasons
1. $\overline{AE}$ bisects $\overline{BD}$	1.
2.	2. Given
3. $\overline{BC} \cong \overline{DC}$	3.
4. $\angle ACB \cong \angle DCB$	4.
5.	5. Alternate Interior
6.	6. ASA

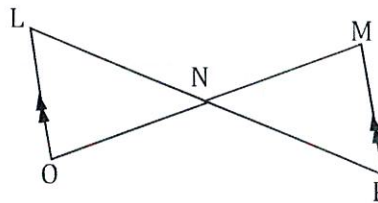
32. Given:  $\overline{AB} \cong \overline{DC}$ ,  $\overline{AB} \parallel \overline{DC}$ , and  $\overline{BC} \cong \overline{CE}$



Prove:  $\triangle ABC \cong \triangle DCE$

Statements	Reasons
1. $\overline{AB} \cong \overline{DC}$	1. Given
2.	2. Given
3.	3. Given
4.	4. Corresponding Angles
5. $\triangle ABC \cong \triangle DCE$	5.

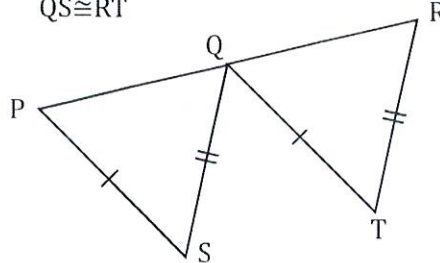
34. Given:  $\overline{LP}$  bisects  $\overline{MO}$ ,  $\overline{LO} \parallel \overline{MP}$



Prove:  $\triangle LNO \cong \triangle MNP$

Statements	Reasons
1.	1. Given
2.	2. Given
3. $\overline{LN} \cong \overline{PN}$	3.
4.	4. Alternate Interior
5.	5. Vertical Angles
6.	6. ASA

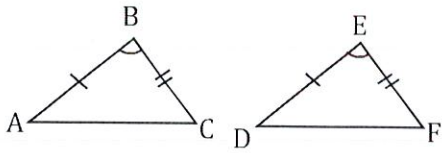
36. Given: Q is the midpoint of  $\overline{PR}$ ,  $\overline{PS} \cong \overline{QT}$  and  $\overline{QS} \cong \overline{RT}$



Prove:  $\triangle PQS \cong \triangle RQT$

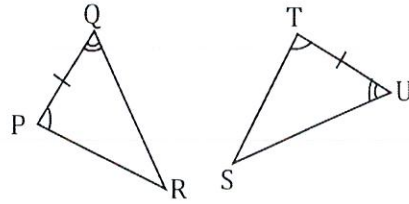
Statements	Reasons
1.	1. Given
2.	2. Given
3. $\overline{QS} \cong \overline{RT}$	3.
4.	4. Midpoint
5. $\triangle PQS \cong \triangle RQT$	5.

27. Given:  $\overline{AB} \cong \overline{DE}$ ,  $\overline{BC} \cong \overline{EF}$ , and  $\angle B \cong \angle E$



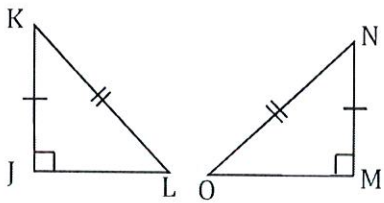
Prove:  $\triangle ABC \cong \triangle DEF$

28. Given:  $\overline{PQ} \cong \overline{TU}$ ,  $\angle P \cong \angle T$ , and  $\angle Q \cong \angle U$



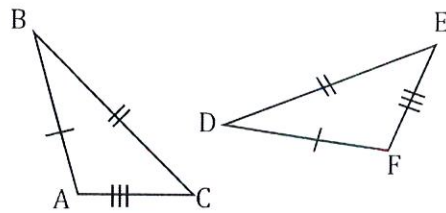
Prove:  $\triangle PQR \cong \triangle TUS$

29. Given:  $JK \cong MN$ ,  $KL \cong NO$



Prove:  $\triangle JKL \cong \triangle MNO$

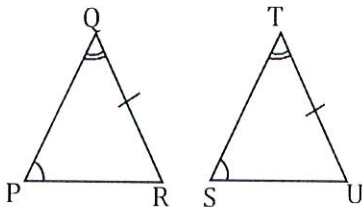
30. Given:  $\overline{AB} \cong \overline{DF}$ ,  $\overline{BC} \cong \overline{DE}$ , and  $\overline{AC} \cong \overline{EF}$



Prove:  $\triangle ABC \cong \triangle DEF$

31.

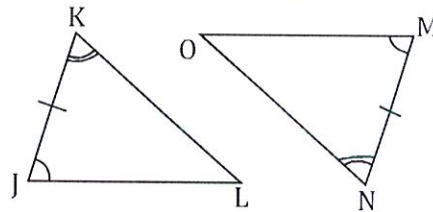
Given:  $\angle P \cong \angle S$ ,  $\angle Q \cong \angle T$ , and  $\overline{QR} \cong \overline{TU}$



Prove:  $\triangle PQR \cong \triangle STU$

32.

Given:  $\angle J \cong \angle M$ ,  $\overline{JK} \cong \overline{MN}$  and  $\angle K \cong \angle N$



Prove:  $\triangle JKL \cong \triangle MNO$