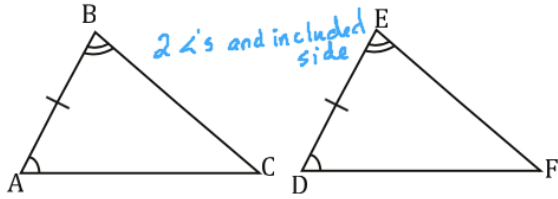


For these fill in any missing statements or reasons.

1.

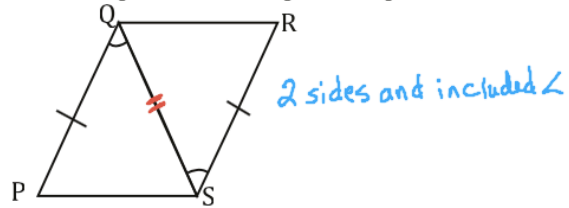
Given: $\overline{AB} \cong \overline{DE}$, $\angle B \cong \angle E$, and $\angle A \cong \angle D$



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

| Statements | Reasons |
|--|----------|
| 1. $\overline{AB} \cong \overline{DE}$ | 1. Given |
| 2. $\angle B \cong \angle E$ | 2. Given |
| 3. $\angle A \cong \angle D$ | 3. Given |
| 4. $\triangle ABC \cong \triangle DEF$ | 4. ASA |

2. Given: $\overline{PQ} \cong \overline{RS}$, and $\angle PQS \cong \angle RSQ$

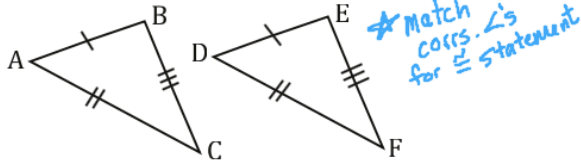


Prove: $\triangle PQS \cong \triangle RSQ$

| Statements | Reasons |
|--|-------------------------|
| 1. $\overline{PQ} \cong \overline{RS}$ | 1. Given |
| 2. $\angle PQS \cong \angle RSQ$ | 2. Given |
| 3. $\overline{QS} \cong \overline{QS}$ | 3. Ref. Prop of \cong |
| 4. $\triangle PQS \cong \triangle RSQ$ | 4. SAS |

3.

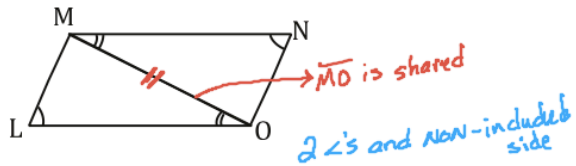
Given: $\overline{AB} \cong \overline{DE}$, $\overline{AC} \cong \overline{DF}$, and $\overline{BC} \cong \overline{EF}$



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

| Statements | Reasons |
|--|----------|
| 1. $\overline{AB} \cong \overline{DE}$ | 1. Given |
| 2. $\overline{AC} \cong \overline{DF}$ | 2. Given |
| 3. $\overline{BC} \cong \overline{EF}$ | 3. Given |
| 4. $\triangle ABC \cong \triangle DEF$ | 4. SSS |

4. Given: $\angle L \cong \angle N$, $\angle LMO \cong \angle NMO$

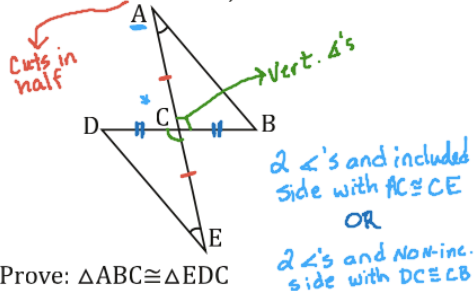


Prove: $\triangle LMO \cong \triangle NMO$

| Statements | Reasons |
|--|-----------------------|
| 1. $\angle L \cong \angle N$ | 1. Given |
| 2. $\angle LMO \cong \angle NMO$ | 2. Given |
| 3. $\overline{MO} \cong \overline{MO}$ | 3. Reflexive Property |
| 4. $\triangle LMO \cong \triangle NMO$ | 4. AAS |

5.

Given: \overline{AE} bisects \overline{BD} , $\angle A \cong \angle E$



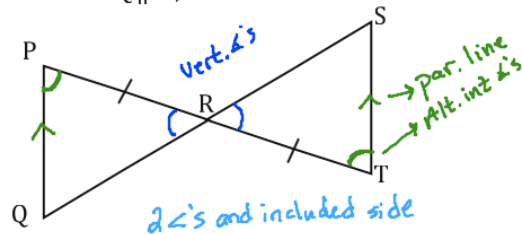
Prove: $\triangle ABC \cong \triangle EDC$

| Statements | Reasons |
|---|----------------------------------|
| 1. $\angle A \cong \angle E$ | 1. Given |
| 2. \overline{AE} bis. \overline{BD} | 2. Given |
| 3. $\overline{AC} \cong \overline{CE}$ | 3. Definition of Bisect |
| 4. $\angle ACB \cong \angle DCE$ | 4. Vert. \angle 's are \cong |
| 5. $\triangle ABC \cong \triangle EDC$ | 5. ASA or AAS |

or $\overline{DC} \cong \overline{CB}$

6.

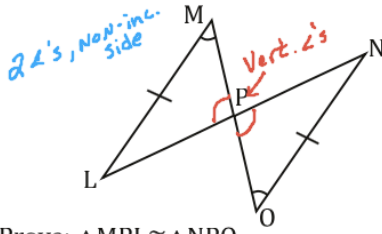
Given: $\overline{PQ} \parallel \overline{ST}$, $\overline{PR} \cong \overline{TR}$



Prove: $\triangle PQR \cong \triangle TSR$

| Statements | Reasons |
|--|----------------------------------|
| 1. $\overline{PR} \cong \overline{TR}$ | 1. Given |
| 2. $\overline{PQ} \parallel \overline{ST}$ | 2. Given |
| 3. $\angle P \cong \angle T$ | 3. Alt. int. \angle 's \cong |
| 4. $\angle PRQ \cong \angle TRS$ | 4. Vert. \angle 's \cong |
| 5. $\triangle PQR \cong \triangle TSR$ | 5. ASA |

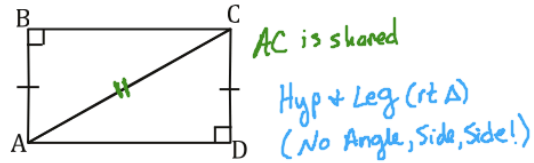
7. Given: $\overline{LM} \cong \overline{NO}$, and $\angle M \cong \angle O$



Prove: $\triangle MPL \cong \triangle NPO$

| Statements | Reasons |
|--|----------------------------------|
| 1. $\overline{LM} \cong \overline{NO}$ | 1. Given |
| 2. $\angle M \cong \angle O$ | 2. Given |
| 3. $\angle MPL \cong \angle OPN$ | 3. Vert. \angle 's are \cong |
| 4. $\triangle MPL \cong \triangle NPO$ | 4. AAS |

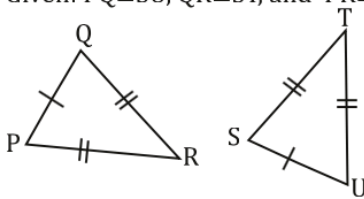
8. Given: $\overline{AB} \cong \overline{DC}$



Prove: $\triangle ABC \cong \triangle CDA$

| Statements | Reasons |
|--|----------------------------|
| 1. $\overline{AB} \cong \overline{DC}$ | 1. Given |
| 2. $\overline{AC} \cong \overline{AC}$ | 2. Reflexive prop. \cong |
| 3. $\triangle ABC \cong \triangle CDA$ | 3. HL |

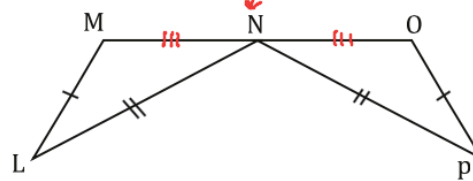
9. Given: $\overline{PQ} \cong \overline{SU}$, $\overline{QR} \cong \overline{ST}$, and $\overline{PR} \cong \overline{TU}$



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

| Statements | Reasons |
|--|----------|
| 1. $\overline{PQ} \cong \overline{SU}$ | 1. Given |
| 2. $\overline{QR} \cong \overline{ST}$ | 2. Given |
| 3. $\overline{PR} \cong \overline{TU}$ | 3. Given |
| 4. $\triangle PQR \cong \triangle STU$ | 4. SSS |

10. Given: N is the midpoint of \overline{MO} , $\overline{LM} \cong \overline{OP}$, and $\overline{LN} \cong \overline{PN}$

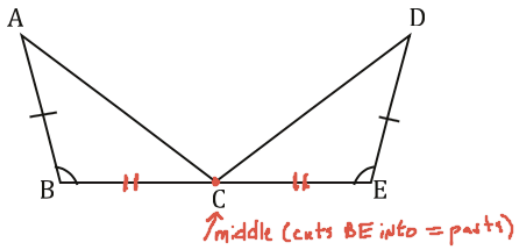


Prove: $\triangle LMN \cong \triangle PON$

| Statements | Reasons |
|---|-------------|
| 1. $\overline{LM} \cong \overline{OP}$ | 1. Given |
| 2. $\overline{LN} \cong \overline{PN}$ | 2. Given |
| 3. N is the Midpoint of \overline{MO} | 3. Given |
| 4. $\overline{MN} \cong \overline{NO}$ | 4. Midpoint |
| 5. $\triangle LMN \cong \triangle PON$ | 5. SSS |

- 11.

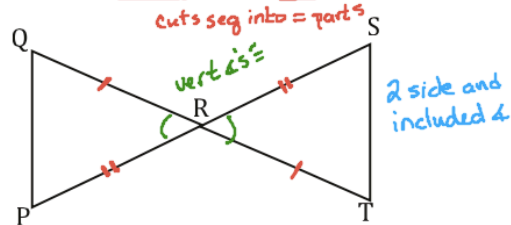
Given: C is the midpoint of \overline{BE} , $\angle B \cong \angle E$, and $\overline{AB} \cong \overline{DE}$



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

| Statements | Reasons |
|--|-------------|
| 1. $\angle B \cong \angle E$ | 1. Given |
| 2. $\overline{AB} \cong \overline{DE}$ | 2. Given |
| 3. C is midpt of BE | 3. Given |
| 4. $\overline{BC} \cong \overline{CE}$ | 4. Midpoint |
| 5. $\triangle ABC \cong \triangle DEC$ | 5. SAS |

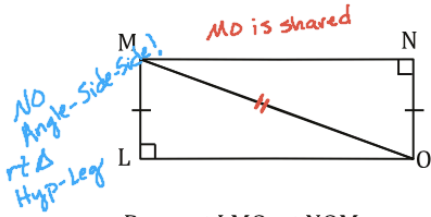
12. Given: \overline{QT} bisects \overline{SP} , \overline{SP} bisects \overline{QT}



Prove: $\triangle QRP \cong \triangle SRT$

| Statements | Reasons |
|--|-------------------------|
| 1. \overline{QT} bisects \overline{SP} | 1. Given |
| 2. \overline{SP} bis. \overline{QT} | 2. Given |
| 3. $\overline{QR} \cong \overline{TR}$ | 3. Definition of Bisect |
| 4. $\overline{PR} \cong \overline{SR}$ | 4. Def. of Bisect |
| 5. $\angle QRP \cong \angle SRT$ | 5. Vertical Angles |
| 6. $\triangle QRP \cong \triangle SRT$ | 6. SAS |

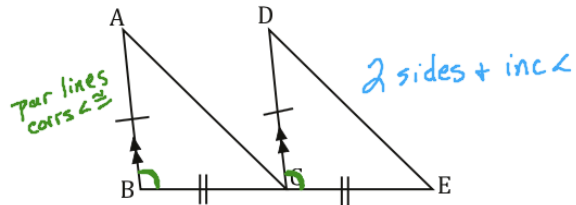
13. Given: $\overline{LM} \cong \overline{NO}$



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

| Statements | Reasons |
|--|----------------------|
| 1. $\overline{LM} \cong \overline{NO}$ | 1. Given |
| 2. $\overline{MO} \cong \overline{MO}$ | 2. Ref. prop \cong |
| 3. $\triangle LMO \cong \triangle NOM$ | 3. HL |

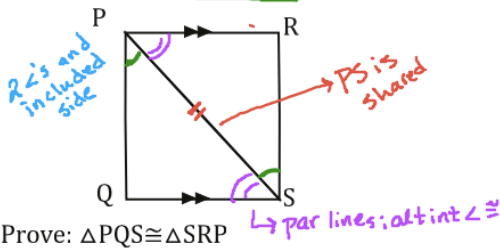
14. Given: $\overline{AB} \cong \overline{DC}$, $\overline{AB} \parallel \overline{DC}$, and $\overline{BC} \cong \overline{CE}$



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

| Statements | Reasons |
|--|-------------------------|
| 1. $\overline{AB} \cong \overline{DC}$ | 1. Given |
| 2. $\overline{AB} \parallel \overline{DC}$ | 2. Given |
| 3. $\overline{BC} \cong \overline{CE}$ | 3. Given |
| 4. $\angle ABC \cong \angle DCE$ | 4. Corresponding Angles |
| 5. $\triangle ABC \cong \triangle DCE$ | 5. SAS |

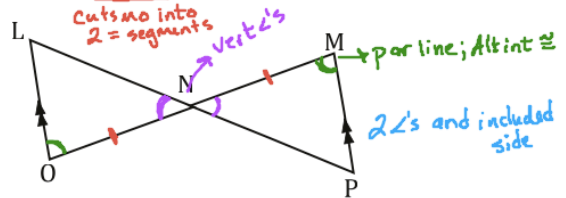
15. Given: $\overline{PR} \parallel \overline{QS}$, $\angle QPS \cong \angle RSP$



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

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

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

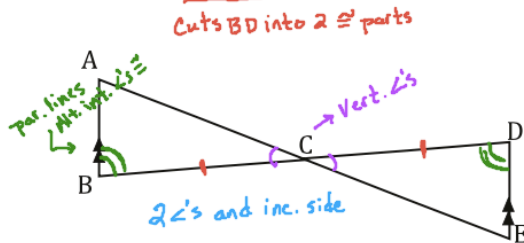


Prove: $\triangle LNO \cong \triangle MNP$

| Statements | Reasons |
|--|-----------------------|
| 1. \overline{LP} bisects \overline{MO} | 1. Given |
| 2. $\overline{LO} \parallel \overline{MP}$ | 2. Given |
| 3. $\overline{LN} \cong \overline{PN}$ | 3. Def. of bisector |
| 4. $\angle L \cong \angle M$ | 4. Alternate Interior |
| 5. $\angle LNO \cong \angle MNP$ | 5. Vertical Angles |
| 6. $\triangle LNO \cong \triangle MNP$ | 6. ASA |

17.

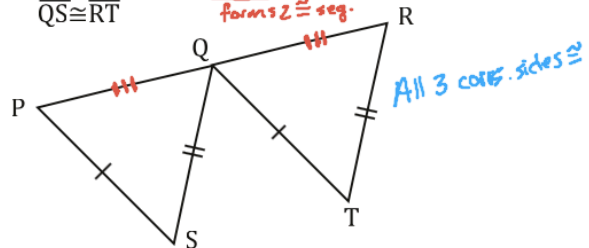
Given: \overline{AE} bisects \overline{BD} , $\overline{AB} \parallel \overline{DE}$



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

| Statements | Reasons |
|--|--------------------------|
| 1. \overline{AE} bisects \overline{BD} | 1. Given |
| 2. $\overline{AB} \parallel \overline{DE}$ | 2. Given |
| 3. $\overline{BC} \cong \overline{DC}$ | 3. Def. of bisector |
| 4. $\angle ACB \cong \angle DCB$ | 4. Vert. ∠'s are \cong |
| 5. $\angle B \cong \angle D$ | 5. Alternate Interior |
| 6. $\triangle ABC \cong \triangle DCE$ | 6. ASA |

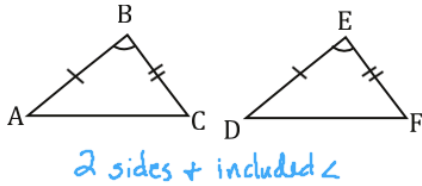
18. Given: Q is the midpoint of \overline{PR} , $\overline{PS} \cong \overline{QT}$ and $\overline{QS} \cong \overline{RT}$



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

| Statements | Reasons |
|--|-------------|
| 1. Q is midpt of \overline{PR} | 1. Given |
| 2. $\overline{PS} \cong \overline{QT}$ | 2. Given |
| 3. $\overline{QS} \cong \overline{RT}$ | 3. Given |
| 4. $\overline{PQ} \cong \overline{QR}$ | 4. Midpoint |
| 5. $\triangle PQS \cong \triangle RQT$ | 5. SSS |

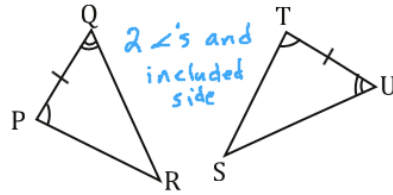
19. Given: $\overline{AB} \cong \overline{DE}$, $\overline{BC} \cong \overline{EF}$, and $\angle B \cong \angle E$



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

- | | |
|--|----------|
| 1. $\overline{AB} \cong \overline{DE}$ | 1. Given |
| 2. $\overline{BC} \cong \overline{EF}$ | 2. Given |
| 3. $\angle B \cong \angle E$ | 3. Given |
| 4. $\triangle ABC \cong \triangle DEF$ | 4. SAS |

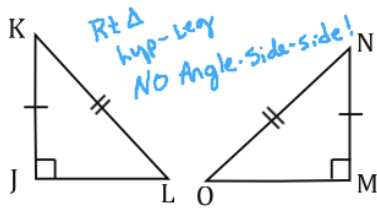
20. Given: $\overline{PQ} \cong \overline{TU}$, $\angle P \cong \angle T$, and $\angle Q \cong \angle U$



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

- | | |
|--|----------|
| 1. $\overline{PQ} \cong \overline{TU}$ | 1. Given |
| 2. $\angle P \cong \angle T$ | 2. Given |
| 3. $\angle Q \cong \angle U$ | 3. Given |
| 4. $\triangle PQR \cong \triangle TUS$ | 4. ASA |

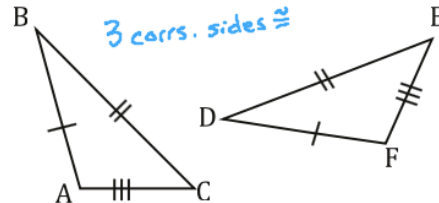
21. Given: $\overline{JK} \cong \overline{MN}$, $\overline{KL} \cong \overline{NO}$



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

- | | |
|---|----------|
| 1. $\overline{JK} \cong \overline{MN}$ | 1. Given |
| 2. $\overline{KL} \cong \overline{NO}$ | 2. Given |
| 3.) $\triangle JKL \cong \triangle MNO$ | 3. HL |

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

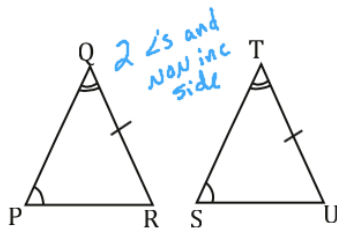


Prove: $\triangle ABD \cong \triangle FDE$

- | | |
|--|----------|
| 1. $\overline{AB} \cong \overline{DF}$ | 1. Given |
| 2. $\overline{BC} \cong \overline{DE}$ | 2. Given |
| 3. $\overline{AC} \cong \overline{EF}$ | 3. Given |
| 4. $\triangle ABD \cong \triangle FDE$ | 4. SSS |

23.

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

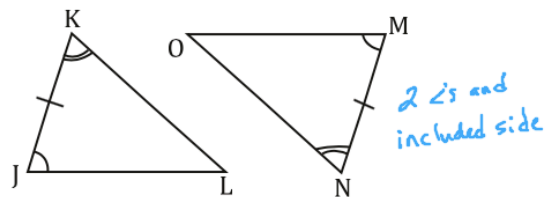


Prove: $\triangle PQR \cong \triangle STU$

- | | |
|--|----------|
| 1. $\angle P \cong \angle S$ | 1. Given |
| 2. $\angle Q \cong \angle T$ | 2. Given |
| 3. $\overline{QR} \cong \overline{TU}$ | 3. Given |
| 4. $\triangle PQR \cong \triangle STU$ | 4. AAS |

24.

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



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

- | | |
|--|----------|
| 1. $\angle J \cong \angle M$ | 1. Given |
| 2. $\overline{JK} \cong \overline{MN}$ | 2. Given |
| 3. $\angle K \cong \angle N$ | 3. Given |
| 4. | 4. |