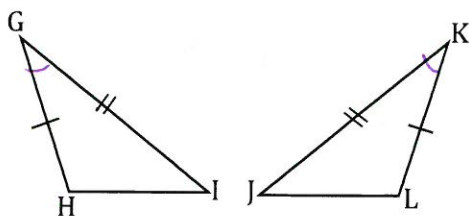


Fill in the missing information in each proof.

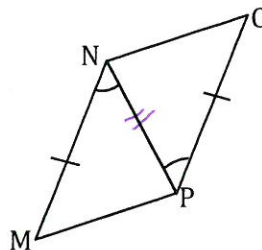
4. Given:  $\overline{GH} \cong \overline{KL}$ ,  $\angle G \cong \angle K$ , and  $\overline{GI} \cong \overline{KJ}$



Prove:  $\overline{HI} \cong \overline{LJ}$

Statements	Reasons
1. $\overline{GH} \cong \overline{KL}$	1. Given
2. $\angle G \cong \angle K$	2. Given
3. $\overline{GI} \cong \overline{KJ}$	3. Given
4. $\triangle GHI \cong \triangle KJL$	4. SAS
5. $\overline{HI} \cong \overline{LJ}$	5. CPCTC

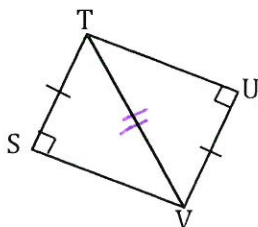
5. Given:  $\angle MNP \cong \angle OPN$ , and  $\overline{MN} \cong \overline{OP}$



Prove:  $\overline{MP} \cong \overline{NO}$

Statements	Reasons
1. $\angle MNP \cong \angle OPN$	1. Given
2. $\overline{MN} \cong \overline{OP}$	2. Given
3. $\overline{NP} \cong \overline{NP}$	3. Reflexive
4. $\triangle MNP \cong \triangle OPN$	4. SAS
5. $\overline{MP} \cong \overline{NO}$	5. CPCTC

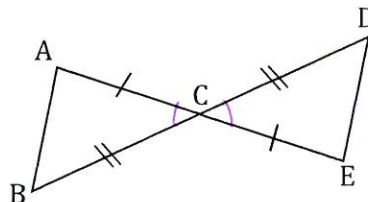
6. Given:  $\overline{ST} \cong \overline{VU}$



Prove:  $\angle SVT \cong \angle UVU$

Statements	Reasons
1. $\overline{ST} \cong \overline{VU}$	1. Given
2. $\overline{TU} \cong \overline{TU}$	2. Reflexive Property
3. $\triangle SVT \cong \triangle UVU$	3. HL
4. $\angle SVT \cong \angle UVU$	4. CPCTC

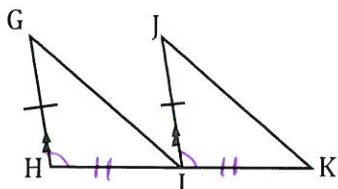
7. Given:  $\overline{AC} \cong \overline{CE}$ ,  $\overline{DC} \cong \overline{BC}$



Prove:  $\angle B \cong \angle D$

Statements	Reasons
1. $\overline{AC} \cong \overline{CE}$	1. Given
2. $\overline{DC} \cong \overline{BC}$	2. Given
3. $\angle ACB \cong \angle DCE$	3. Vertical Angles Thm
4. $\triangle ABC \cong \triangle DEC$	4. SAS
5. $\angle B \cong \angle D$	5. CPCTC

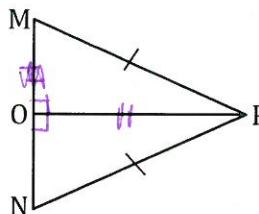
8. Given:  $\overline{GH} \parallel \overline{JI}$ , I is the midpoint of  $\overline{HK}$  and  $\overline{GH} \cong \overline{JI}$



Prove:  $\angle G \cong \angle J$

Statements	Reasons
1. $\overline{GH} \parallel \overline{JI}$	1. Given
2. I is the midpoint of $\overline{HK}$	2. Given
3. $\overline{GI} \cong \overline{JI}$	3. Given
4. $\overline{HI} \cong \overline{IK}$	4. Def of Midpoint
5. $\angle GHI \cong \angle JIK$	5. Corresponding
6. $\triangle GHI \cong \triangle JIK$	6. SAS
7. $\angle G \cong \angle J$	7. CPCTC

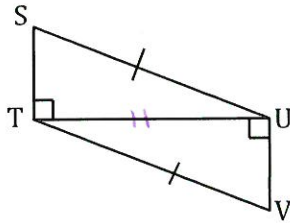
9. Given:  $\overline{MP} \cong \overline{NP}$ ,  $\overline{MN} \perp \overline{OP}$



Prove:  $\overline{MO} \cong \overline{NO}$

Statements	Reasons
1. $\overline{MP} \cong \overline{NP}$	1. Given
2. $\overline{MN} \perp \overline{OP}$	2. Given
3. $\overline{OP} \cong \overline{OP}$	3. Reflexive
4. $\triangle MOP \cong \triangle NOP$	4. HL
5. $\overline{MO} \cong \overline{NO}$	5. CPCTC

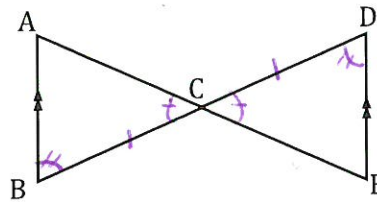
10. Given:  $\overline{SU} \cong \overline{VT}$



Prove:  $\overline{ST} \cong \overline{UV}$

Statements	Reasons
1. $\overline{SU} \cong \overline{VT}$	1. Given
2. $\overline{TU} \cong \overline{TU}$	2. Reflexive
3. $\triangle STU \cong \triangle VUT$	3. HL
4. $\overline{ST} \cong \overline{UV}$	4. CPCTC

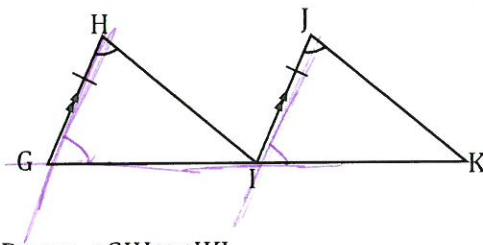
11. Given:  $\overline{AB} \parallel \overline{DE}$ ,  $\overline{AE}$  bisects  $\overline{BD}$



Prove:  $\overline{AC} \cong \overline{EC}$

Statements	Reasons
1. $\overline{AB} \parallel \overline{DE}$	1. Given
2. $\overline{AE}$ bisects $\overline{BD}$	2. Given
3. $\angle ABC \cong \angle EDC$	3. Alt. Int. Angles Thm
4. $\angle ACB \cong \angle DCE$	4. Vertical Angles Thm
5. $\overline{BC} \cong \overline{DC}$	5. Def of Bisect
6. $\triangle ABC \cong \triangle EDC$	6. ASA
7. $\overline{AC} \cong \overline{EC}$	7. CPCTC

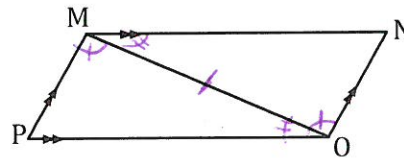
12. Given:  $\overline{GH} \parallel \overline{IJ}$ ,  $\angle H \cong \angle J$  and  $\overline{GH} \cong \overline{IJ}$



Prove:  $\angle GIH \cong \angle IKJ$

Statements	Reasons
1. $\overline{GH} \parallel \overline{IJ}$	1. Given
2. $\angle H \cong \angle J$	2. Given
3. $\overline{GH} \cong \overline{IJ}$	3. Given
4. $\angle HGI \cong \angle IJK$	4. Alternate Interior
5. $\triangle HGI \cong \triangle IJK$	5. ASA
6. $\angle GIH \cong \angle IKJ$	6. CPCTC

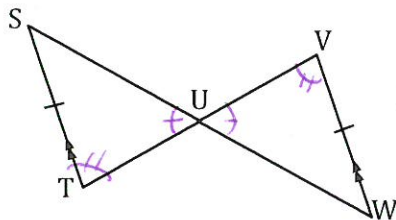
13. Given:  $\overline{PM} \parallel \overline{NO}$ ,  $\overline{MN} \parallel \overline{PO}$



Prove:  $\overline{PM} \cong \overline{ON}$

Statements	Reasons
1. $\overline{PM} \parallel \overline{ON}$	1. Given
2. $\overline{MN} \parallel \overline{PO}$	2. Given
3. $\angle PMO \cong \angle NOP$	3. Alt Int Angles Thm
4. $\angle POM \cong \angle ONM$	4. Alternate Interior
5. $\overline{MO} \cong \overline{MO}$	5. Reflexive Prop.
6. $\triangle PMO \cong \triangle ONM$	6. ASA
7. $\overline{PM} \cong \overline{ON}$	7. CPCTC

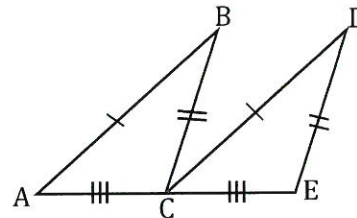
14. Given:  $\overline{ST} \parallel \overline{VW}$ , and  $\overline{ST} \cong \overline{VW}$



Prove:  $\overline{SU} \cong \overline{WU}$

Statements	Reasons
1. $\overline{ST} \parallel \overline{VW}$	1. Given
2. $\overline{ST} \cong \overline{VW}$	2. Given
3. $\angle T \cong \angle V$	3. Alternate Interior
4. $\angle SUT \cong \angle WUV$	4. Vertical Angles Thm
5. $\triangle SUT \cong \triangle WUV$	5. AAS
6. $\overline{SU} \cong \overline{WU}$	6. CPCTC

15. Given:  $\overline{AB} \cong \overline{CD}$ ,  $\overline{BC} \cong \overline{DE}$ , and  $\overline{AC} \cong \overline{CE}$



Prove:  $\angle A \cong \angle DCE$

Statements	Reasons
1. $\overline{AB} \cong \overline{CD}$	1. Given
2. $\overline{BC} \cong \overline{DE}$	2. Given
3. $\overline{AC} \cong \overline{CE}$	3. Given
4. $\triangle ABC \cong \triangle CDE$	4. SSS
5. $\angle A \cong \angle DCE$	5. CPCTC