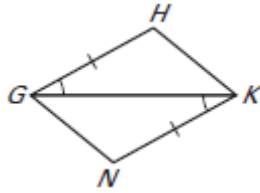
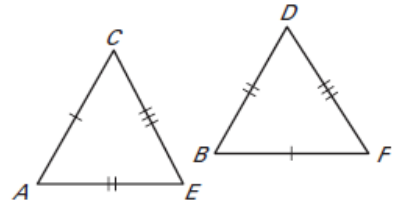


Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use.

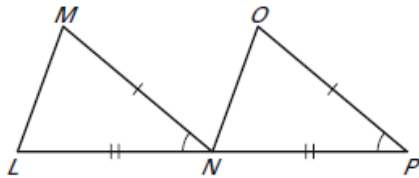
1.



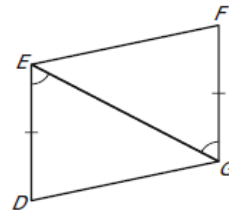
2.



3.



4.



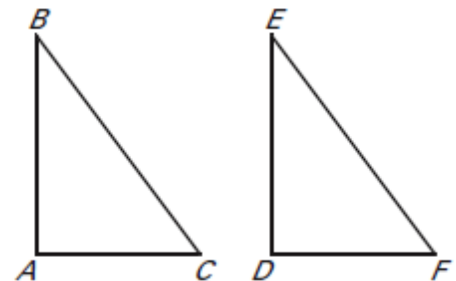
State the third congruence that is needed to prove that $\triangle ABC \cong \triangle XYZ$ using the given postulate or theorem.

5. GIVEN: $\angle B \cong \angle E, \overline{BC} \cong \overline{EF}, \underline{\hspace{2cm}} \cong \underline{\hspace{2cm}}$

Use the SAS Congruence Theorem

6. GIVEN: $\overline{AB} \cong \overline{DE}, \overline{BC} \cong \overline{EF}, \underline{\hspace{2cm}} \cong \underline{\hspace{2cm}}$

Use the SSS Congruence Postulate

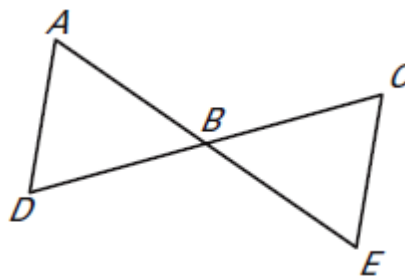


7. Complete the proof.

GIVEN: B is the midpoint of \overline{AE}

B is the midpoint of \overline{CD}

PROVE: $\triangle ABD \cong \triangle EBC$

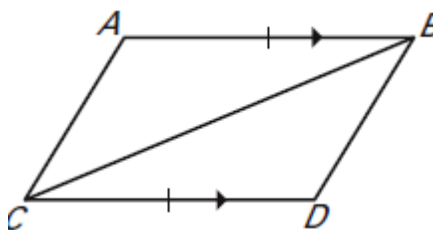


Statements	Reasons
1. B is the midpoint of \overline{AE}	1.
2.	2. Definition of midpoint
3. B is the midpoint of \overline{CD}	3.
4.	4. Definition of midpoint
5. $\angle ABD \cong \angle EBC$	5.
6. $\triangle ABD \cong \triangle EBC$	6.

8. Complete the proof.

GIVEN: $\overline{AB} \parallel \overline{CD}$, $\overline{AB} \cong \overline{CD}$

PROVE: $\triangle ABC \cong \triangle DCB$

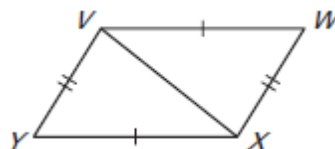


Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$	1.
2. $\angle ABC \cong \angle DCB$	2.
3. $\overline{AB} \cong \overline{CD}$	3.
4. $\overline{CB} \cong \overline{CB}$	4.
5. $\triangle ABC \cong \triangle DCB$	5.

9. Complete the proof.

Given : $\overline{VW} \cong \overline{XY}$, $\overline{WX} \cong \overline{YV}$

Prove : $\triangle WXV \cong \triangle YVX$



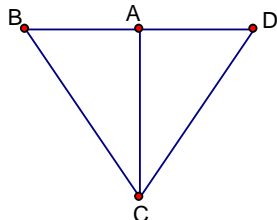
Statements	Reasons
1. $\overline{VW} \cong \overline{XY}$	1.
2. $\overline{WX} \cong \overline{YV}$	2.
3.	3.
4. $\triangle WXV \cong \triangle YVX$	4.

10. Complete the proof.

Given: $\overline{BC} \cong \overline{CD}$

\overline{AC} bisects $\angle BCD$

Prove: $\triangle ABC \cong \triangle ADC$



Statements	Reasons
1. $\overline{BC} \cong \overline{CD}$	1.
2.	2. Given
3.	3. Definition of Angle Bisector
4.	4.
5. $\triangle ABC \cong \triangle ADC$	5.

Answer Key:

1. SAS 2. SSS 3. SAS 4. SAS 5. $\overline{AB} \cong \overline{DE}$ 6. $\overline{AC} \cong \overline{DF}$

7. 1) Given 2) $\overline{AB} \cong \overline{EB}$ 3) Given 4) $\overline{DB} \cong \overline{CB}$ 5) Vertical Angles Theorem 6) SAS

8. 1) Given 2) Alternate Interior Angles Theorem 3) Given 4) Reflexive Property 5) SAS

9. 1) Given 2) Given 3) Reflexive Property 4) SSS

10. 1) Given 2) \overline{AC} bisects $\angle BCD$ 3) $\angle BCA \cong \angle DCA$ 4) $\overline{AC} \cong \overline{AC}$; Reflexive Prop. 5) SAS