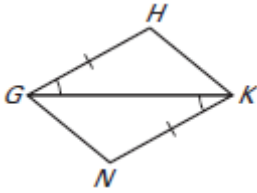
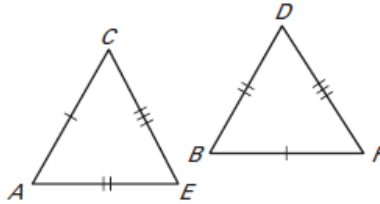


Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use.

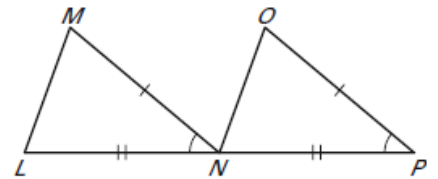
1. $\triangle GHK, \triangle KNG$



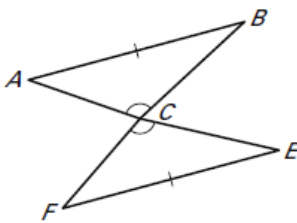
2. $\triangle ACE, \triangle BFD$



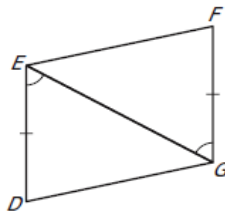
3. $\triangle LNM, \triangle NPO$



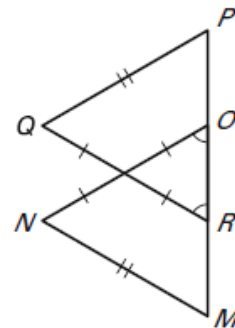
4. $\triangle ACB, \triangle FEC$



5. $\triangle EGF, \triangle GED$



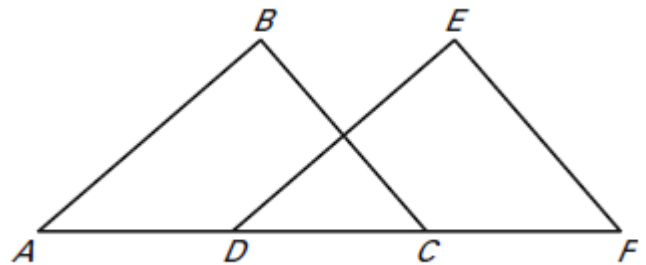
6. $\triangle MNO, \triangle PQR$



State the third congruence that must be given to prove that $\triangle ABC \cong \triangle FED$ using the indicated postulate or theorem.

7. **Given:** $\overline{BC} \cong \overline{ED}, \overline{AC} \cong \overline{FD},$ _____ \cong _____
Use the SAS Congruence Postulate

8. **Given:** $\overline{AB} \cong \overline{FE}, \overline{AC} \cong \overline{FD},$ _____ \cong _____
Use the SSS Congruence Postulate

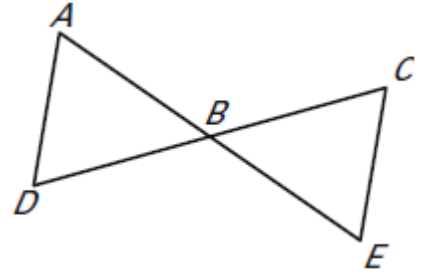


9. Complete the proof.

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

B is the midpoint of \overline{CD}

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

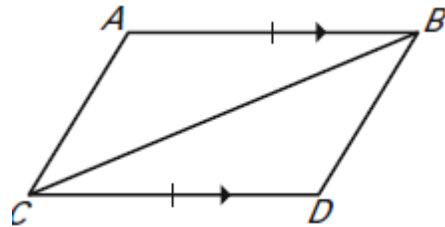


Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6. $\triangle ABD \cong \triangle EBC$	6.

10. Complete the proof.

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

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

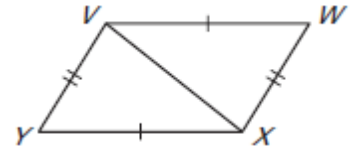


Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

11. Complete the proof.

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

Prove : $\Delta WXV \cong \Delta YVX$



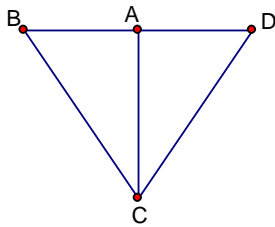
Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.

12. Complete the proof.

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

\overline{AC} bisects $\angle BCD$

Prove: $\Delta ABC \cong \Delta ADC$



Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Answer Key:

1. SAS 2. SSS 3. SAS 4. Not enough info 5. SAS 6. Not enough info

7. $\angle C, \angle D$ 8. $\overline{BC}, \overline{ED}$

9.

Statements	Reasons
1. B is the midpoint of \overline{AE}	1. Given
2. $\overline{AB} \cong \overline{EB}$	2. Definition of midpoint
3. B is the midpoint of \overline{CD}	3. Given
4. $\overline{CB} \cong \overline{DB}$	4. Definition of midpoint
5. $\angle ABD \cong \angle EBC$	5. Vertical Angles Theorem
6. $\triangle ABD \cong \triangle EBC$	6. SAS

10.

Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$	1. Given
2. $\angle ABC \cong \angle DCB$	2. Alternate Interior Angles Theorem
3. $\overline{AB} \cong \overline{CD}$	3. Given
4. $\overline{BC} \cong \overline{BC}$	4. Reflexive Property
5. $\triangle ABC \cong \triangle DCB$	5. SAS

11.

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

12.

Statements	Reasons
1. $\overline{BC} \cong \overline{CD}$	1. Given
2. \overline{AC} bisects $\angle BCD$	2. Given
3. $\angle BCA \cong \angle DCA$	3. Definition of Angle Bisector
4. $\overline{AC} \cong \overline{AC}$	4. Reflexive Property
5. $\triangle ABC \cong \triangle ADC$	5. SAS