

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

State whether the triangles can be proven congruent, if possible, by SSS or SAS. If yes, write a congruency statement.

1.

2.

3.

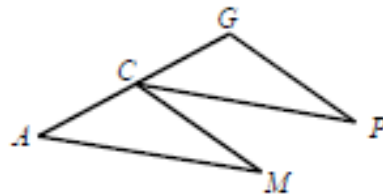
4.

5.

6.

Complete the proofs below using the most appropriate method.

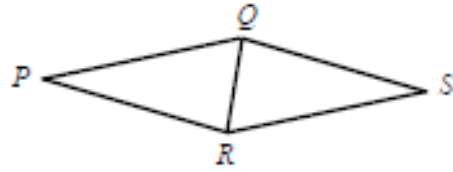
7. **Given:**  $\overline{AM} \cong \overline{CP}$ ,  $\overline{CM} \cong \overline{GP}$ ,  $C$  is the midpoint of  $\overline{AG}$   
**Prove:**  $\triangle ACM \cong \triangle CGP$



Statements	Reasons
1. $\overline{AM} \cong \overline{CP}$	
2. $\overline{CM} \cong \overline{GP}$	
3. $C$ is the midpoint of $\overline{AG}$	
4. $\overline{AC} \cong \overline{GC}$	
5. $\triangle ACM \cong \triangle CGP$	

Given:  $\overline{PQ} \cong \overline{RS}$ ,  $\angle PQR \cong \angle SRQ$

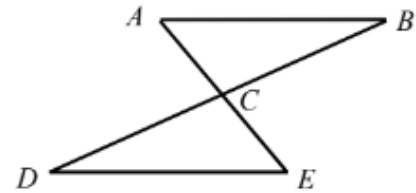
Prove:  $\triangle PQR \cong \triangle SRQ$



Statements	Reasons
1. $\overline{PQ} \cong \overline{RS}$	
2. $\angle PQR \cong \angle SRQ$	
3. $\overline{QR} \cong \overline{QR}$	
4. $\triangle PQR \cong \triangle SRQ$	

8. Given:  $\overline{AB} \cong \overline{DE}$ ,  $\overline{AB} \parallel \overline{DE}$ ,  $C$  is the midpoint of  $\overline{AE}$

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



Statements	Reasons
1. $\overline{AB} \cong \overline{DE}$	
2. $\overline{AB} \parallel \overline{DE}$	
3. $\angle BAC \cong \angle DEC$	
4. $C$ is the midpoint of $\overline{AE}$	
5. $\overline{AC} \cong \overline{EC}$	
6. $\triangle ABC \cong \triangle EDC$	