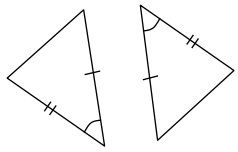
Name: _____ **Unit 4:** Congruent Triangles

Date: _____ **Per:** _____ **Homework 7:** Proofs Review: All Methods

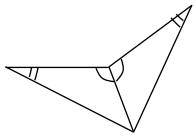
**** This is a 2-page document! ****

Determine if the triangles can be proved congruent, if possible, by SSS, SAS, ASA, AAS, or HL. Write your answer on the line provided. If not congruent, write "not congruent."

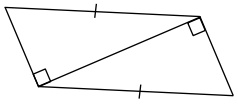
1. _____



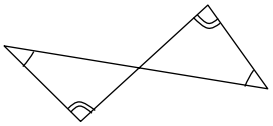
2. _____



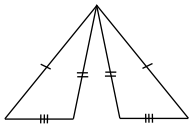
3. _____



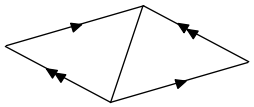
4. _____



5. _____

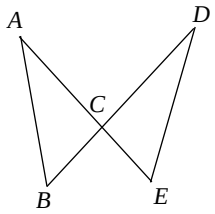


6. _____



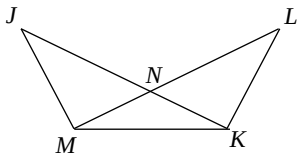
Complete the proofs using the most appropriate method. Some may require CPCTC.

7. Given: $\angle BAC \cong \angle EDC$, $\overline{BC} \cong \overline{EC}$
Prove: $\Delta ABC \cong \Delta DEC$



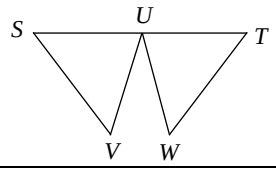
Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.

8. Given: $\overline{JK} \cong \overline{LM}$, $\angle JKM \cong \angle LMK$
Prove: $\Delta JMK \cong \Delta LKM$



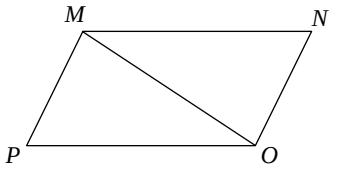
Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.

9. Given: U is the midpoint of $\overline{ST}$, $\overline{SV} \cong \overline{TW}$, $\overline{VU} \cong \overline{WU}$
Prove: $\angle SVU \cong \angle TWU$



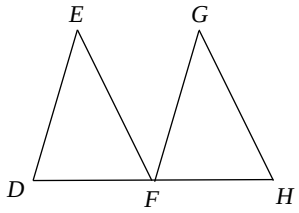
Statements	Reasons
1.	**1.**
2.	**2.**
3.	**3.**
4.	**4.**
5.	**5.**
6.	**6.**

10. Given: $\overline{MN} \parallel \overline{PO}$, $\overline{MP} \parallel \overline{NO}$
Prove: $\overline{MP} \cong \overline{ON}$



Statements	Reasons
1.	**1.**
2.	**2.**
3.	**3.**
4.	**4.**
5.	**5.**
6.	**6.**
7.	**7.**

11. Given: $\overline{DE} \parallel \overline{FG}$, $\overline{DE} \cong \overline{FG}$, $\angle DEF \cong \angle FGH$
Prove: $\angle DFE \cong \angle FHG$



Statements	Reasons
1.	**1.**
2.	**2.**
3.	**3.**
4.	**4.**
5.	**5.**
6.	**6.**