

Name _____

Date _____

Triangles – Part 1
Triangle Congruence – SSS and SAS – Part 1
Independent Practice

1. If $\triangle GTR \cong \triangle NAO$, then finish the following congruence statements and mark the corresponding congruent sides and the corresponding congruent angles.

$\angle A \cong$ _____

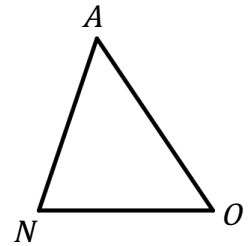
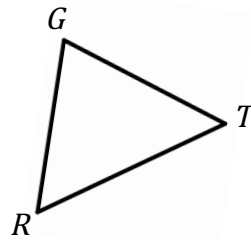
$\overline{NO} \cong$ _____

_____ $\cong \angle R$

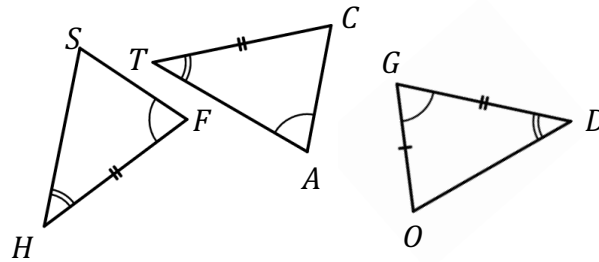
_____ $\cong \overline{GT}$

$\angle G \cong$ _____

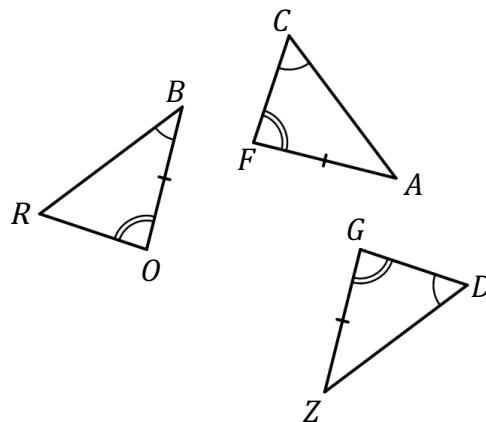
$\overline{RT} \cong$ _____



2. Name two triangles that are congruent by ASA.



3. Name two triangles that are congruent by AAS.



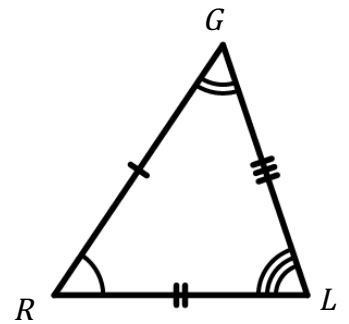
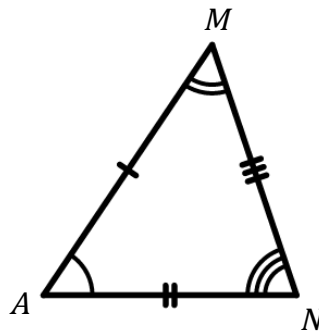
4. Complete the congruence statements for the triangles below.

$$\triangle GRL \cong \triangle \underline{\hspace{2cm}}$$

$$\angle N \cong \angle \underline{\hspace{2cm}}$$

$$\overline{GL} \cong \underline{\hspace{2cm}}$$

$$\angle R + \angle N \cong \angle \underline{\hspace{2cm}} + \angle \underline{\hspace{2cm}}$$

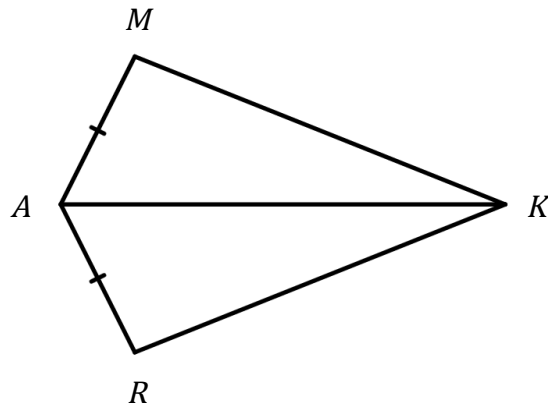


5. Circle the words in the highlighted fields that complete the sentence.

Part A: If two **angles | sides** and the included angle of one triangle are **similar | congruent** to two sides and the included angle of a second triangle, then the two triangles are congruent by the **SSS | SAS | AAS | ASA** congruence postulate.

Part B: If **at least two | three** sides of one triangle are congruent to three sides of a second triangle, then the two triangles are congruent by the **SSS | SAS | AAS | ASA** congruence postulate.

6. Consider the figure of the kite below.



Part A: What information is needed to prove that the triangles above are congruent using the SSS Congruence Postulate?

Part B: What information is needed to prove that the triangles above are congruent using the SAS Congruence Postulate?

