Module 7 – Triangle Congruence & Inequalities

Lesson 1 – Triangle Congruence

Name

Fill in the blanks.

1. Triangles that have exactly the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are congruent triangles.

Draw an example for each postulate or theorem.

1. SSS Postulate
2. SAS Postulate
3. ASA Postulate
4. SAA Theorem
5. HL Theorem
6. HA Theorem
7. LL Theorem
8. LA Theorem

Determine which congruence method can be used to prove the given triangles are congruent. Write none if no method applies

|  |  |
| --- | --- |
| 1. | 2. |
| 3. | 4. |

Reference

**SSS Postulate** – The corresponding sides of two triangles are all congruent.

**SAS Postulate** – Two sides and the angle between of one triangle are congruent to the corresponding parts of the other triangle.

**ASA Postulate** – Two angles and their common side in one triangle are congruent to the corresponding parts of the other triangle.

**SAA Theorem** – Two angles and the side opposite of one of the angles in one triangle are congruent to the corresponding parts of the other triangle.

**HL Theorem** – They hypotenuse and one leg of the first right triangle are congruent to the corresponding parts of the second right triangle.

**HA Theorem** – The hypotenuse and an angle not the right angle of the first right triangle are congruent to the corresponding parts of the second right triangle.

**LL Theorem** – The legs of the first right triangle are congruent to the corresponding parts of the second right triangle.

**LA Theorem** – One leg and one angle not the right angle of the first right triangle are congruent to the corresponding parts of the second right triangle.