

This summary worksheet goes with the GeoGebra book: *Triangle Congruence Criteria Exploration*.

**PAGE 1 Big Idea**

Two triangles are congruent when you can map one onto the other using \_\_\_\_\_, \_\_\_\_\_, and/or \_\_\_\_\_. Since rigid motions preserve \_\_\_\_\_ and \_\_\_\_\_, **Corresponding Parts of Congruent Triangles are C**\_\_\_\_\_ (CPCTC).

**PAGE 2 Big Idea**

The converse of CPCTC states that if all 6 corresponding parts of two triangles are congruent, then the triangles must be \_\_\_\_\_.

**PAGE 3 Big Idea**

A triangle congruence criterion or "shortcut" is when you can show two triangles are congruent without \_\_\_\_\_.

**Sketch** a pair of triangles to show that each of the following is **not** a triangle congruence shortcut:

<b>S</b>	<b>SS</b>	<b>SA (opposite)</b>
<b>A</b>	<b>AA(A)</b>	<b>SA (adjacent)</b>

**PAGE 4 Summary**

SSS      is / is not      a triangle congruence shortcut  
 SAS      is / is not      a triangle congruence shortcut  
 SSA      is / is not      a triangle congruence shortcut

HL, which stands for \_\_\_\_\_, is a special case of \_\_\_\_\_ for right triangles which **does** guarantee that the two right triangles will be congruent.

WAIT HERE fo class discussion. While you are waiting, you can practice the "recipe" for mapping one congruent triangle onto another by working with pairs of congruent triangles on this page (Page 4).

### **PAGE 5 Summary**

ASA        is    /    is not        a triangle congruence shortcut

SAA        is    /    is not        a triangle congruence shortcut

WAIT HERE fo class discussion. While you are waiting, you can practice the "recipe" for mapping one congruent triangle onto another by working with pairs of congruent triangles on this page (Page 5).

### **ONE Last Question!**

FINALLY, why don't we need to consider any 4- or 5-letter shortcuts?