**Supplementary Activity**

**Unit 4 Investigation 3**

**AA Similarity Theorem**

**Open the file:** <http://tube.geogebra.org/material/simple/id/2987443>

The **AA Similarity Theorem** states: *If two angles of one triangle are congruent to two angles of another triangle, then the triangles are similar.*

The applet was designed to help you prove this theorem true in the case where both triangles have the same orientation. Feel free to change the size of the white triangle before slowly dragging the slider. *Pay careful attention to what happens as you do.*

1. Name the three transformations that map the white triangle onto the red triangle.
2. What property of dilations is used to show that the corresponding angles with single arcs can be made to coincide?
3. If the triangles had opposite orientations, what you would have to do **first before applying the three transformations shown in this applet?**