

Use this worksheet with the *Prove the SSS Theorem* lesson.

Define Reflection

Page 1: How did your construction relate to the definition of reflection.

Page 2: How did your construction on this page connect to the definition?

The Perpendicular Bisector Theorem

Page 1: How does your construction help show why the theorem must be true?

Page 2: How does your construction on this page show and explain the converse?

Superpose Congruent Segments

Pages 1 and 2: How many reflections did you need to superpose the segments? Were you able to make your construction hold together even when you dragged the points?

Pages 3 and 4: What was unusual about these two pages?

Page 5: What crucial feature is emphasized by the problem on this page?

Superpose SSS Triangles

Use the back of this sheet to explain why the SSS Theorem must be true. Include drawings where appropriate to illustrate your construction steps. Try to describe why each step worked, using the definition of reflection and the Perpendicular Bisector Theorem when they're helpful.

Extra Credit: Why does the first step of the directions tell you to reflect $\triangle ABC$ if the two triangles are similarly handed? Which was unusual about page 4?