1035-X1-233   **Michael Woltermann*** (`mwoltermann@washjeff.edu`), Mathematics Department, Washington and Jefferson College, 60 South Lincoln Street, Washington, PA, and **Katelin Ennis** and **Roman Wong**. *A Sangaku problem with a western proof.*

Sangaku are Japanese geometry problems carved on wooden tablets that were mostly found hanging in temples during the seventeenth and eighteenth centuries. Japanese consider the Sangaku a tradition that incorporates the precision of mathematics with the elegance of art. Most of the Sangaku did not include solutions. One of our students (the second author) recently worked on a Sangaku as her junior project, a capstone course for mathematics majors at our school. The proof of this Sangaku, surprisingly, uses a theorem discovered in Europe more than a hundred years after the discovery and translation of this Sangaku problem. This problem and its proof present a peculiar coincidence and a nice juxtaposition of mathematical thought between the eastern and western world at a time when communications between them were quite restricted. We also describe some extensions to the original problem. (Received August 23, 2007)