

Ideas in Mathematics
Math 170, Spring 2016
Quiz 5

The town of Königsberg (now Kaliningrad, Russia) is situated near the Pregel River. Residents wondered whether they could begin a walk in one part of the city and cross every bridge exactly once. Below on the left is a sketch of the bridges of Königsberg. Describe a walk that would take you across each bridge exactly once. Or explain why such a walk is impossible.

Consider the two strings illustrated below. The string on the right is clearly knotted, and without breaking it there is no way to undo the knot. What about the string in the middle?

