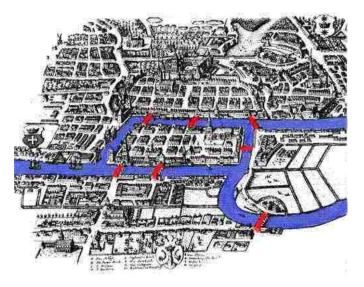
UW Math Circle February 4th, 2016

1. The city of Königsberg has seven bridges (look at the map of the city below). Is there any path through Königsberg that traverses each bridge exactly once? Once you start on a bridge you must go all the way across, and you can't leave the city, swim, pole vault, etc.



2. You have a wire that is 12 inches long. Is it possible to fold this wire into the shape of a 1 inch cube?

3. The country of Ramseyland has 50 towns, and each town has a pipeline connecting it to every other town. How many pipelines are there in all?