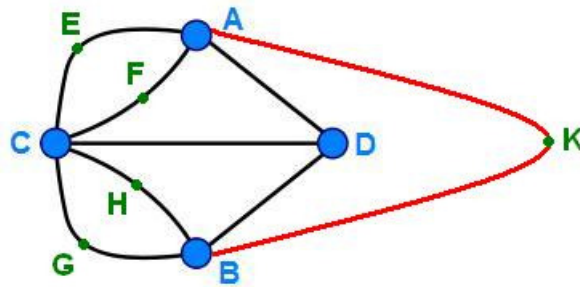
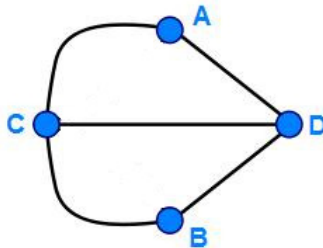


An eighth bridge in Königsberg

In the 19th century another bridge was built in Königsberg to accommodate railroad traffic, going from land mass **A** directly to land mass **B** with no opportunity for access to or from land mass **D**. This new bridge is colored red in the drawing below. As in earlier drawings, we have added the vertices in green to obtain a graph in which every pair of edges either has no points in common or exactly one vertex in common. The objective of the problem is to determine if the expanded graph has an Euler path and to construct one if such a path exists.



However, this is not the end of the story of the bridges. During World War II the city was bombed extensively with damage to all the bridges, and at the end of the war it became part of the Russian Federation and was renamed Kaliningrad after a Mikhail Kalinin, a former president of the Soviet Union whose position was largely ceremonial. The rebuilt city had five modernized bridges (still further changes have taken place since then).



Here are some online references for further reading:

http://en.wikipedia.org/wiki/Seven_Bridges_of_K%C3%B6nigsberg

<http://people.engr.ncsu.edu/mfms/SevenBridges/>

<http://kursinfo.himolde.no/lo-kurs/lo904/Laporte/BridgesPaper.pdf>

<http://www.themoscowtimes.com/news/article/4-killed-in-kaliningrad-bridge-collapse/514312.html>

[*Note.* The third reference mentions a bridge under construction, and apparently this work was completed in late 2012.]