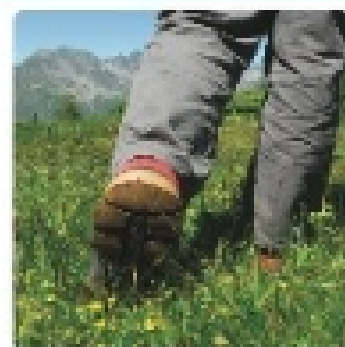


excursions in  
**Modern  
Mathematics**



**Peter Tannenbaum**

seventh edition

# 5 The Mathematics of Getting

## 5.1 Euler Circuit Problems

## 5.2 What Is a Graph?

## 5.3 Graph Concepts and Terminology

## 5.4 Graph Models

## 5.5 Euler's Theorems

## 5.6 Fleury's Algorithm

## 5.7 Eulerizing Graphs

# Euler Paths and Circuits

Our story begins in the 1700s in the medieval town of Königsberg, in Eastern Europe. At the time, Königsberg was divided by a river into four separate sections, which were connected to one another by seven bridges. The old map of Königsberg shown on the next slide gives the layout of the city in 1735, the year a brilliant young mathematician named Leonhard Euler came passing through.