
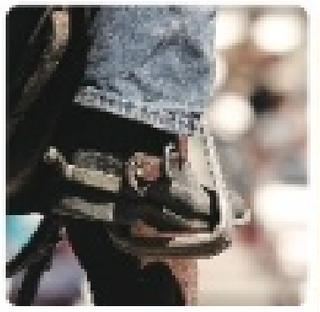
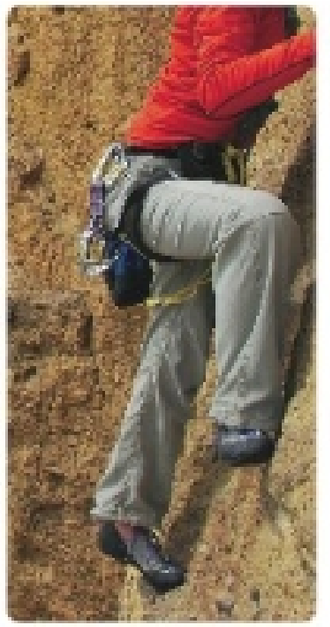

excursions in

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

Exhaustive Routes

In this section we will finally answer some of the routing problems raised at the beginning of the chapter. Their common thread is the need to find *optimal exhaustive routes* in a connected graph.How is this done? Let's first refresh our memories of what this means. We will use the term **exhaustive route** to describe a route that travels along the edges of a graph and passes through *each and every edge* of the graph *at least once*.