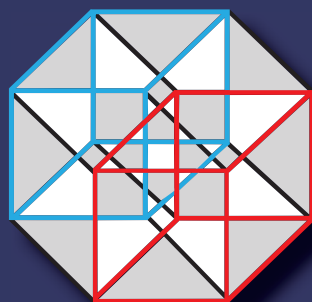
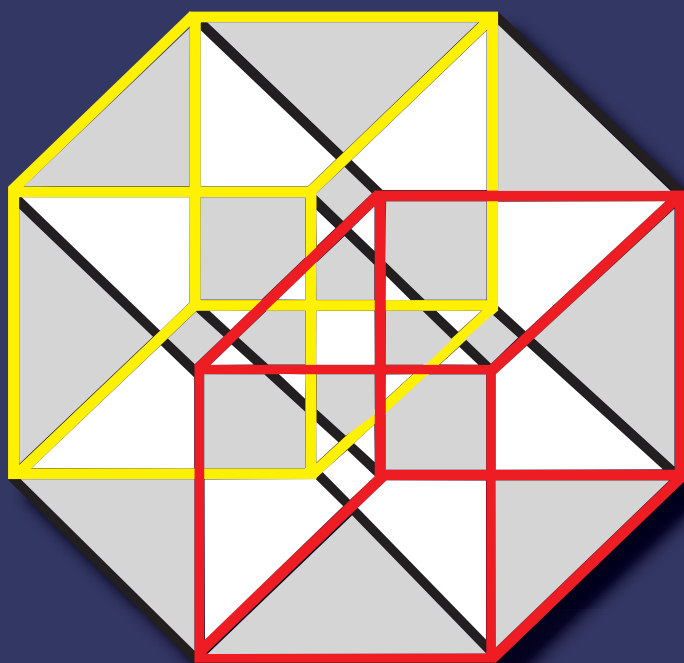


5th Edition



Introduction to Graph Theory

Robin J. Wilson



Introduction to Graph Theory

Introduction to Graph Theory uPDF eBook

Table of Contents

Cover

Introduction to Graph Theory

Contents

Preface to the fifth edition

Introduction

Definitions and examples

- Definitions

- Examples

- Variations on a theme

- Three puzzles

Paths and cycles

- Connectivity

- Eulerian graphs and digraphs

- Hamiltonian graphs and digraphs

- Applications

Trees

- Properties of trees

- Counting trees

- More applications

Planarity

- Planar graphs

Table of Contents

Eulers formula

Dual graphs

Graphs on other surfaces

Colouring graphs

Colouring vertices

Chromatic polynomials

Colouring maps

The four-colour theorem

Colouring edges

Matching, marriage and Mengers theorem

Halls marriage theorem

Mengers theorem

Network flows

Matroids

Introduction to matroids

Examples of matroids

Matroids and graphs

Appendix 1: Algorithms

Appendix 2: Table of numbers

List of symbols

Bibliography

Solutions to selected exercises

Index