

Preface

Welcome to *Stepping It Up!*

This text was adapted for Canadian college students, regardless of the trade or program they have chosen to pursue. We have revised the original U.S. text so that each module can be taught independently of the other modules. The result is a mathematics learning resource that can be tailored specifically to the needs of any class.

To ensure a more relevant learning experience for Canadian students, we have created nearly 100 new examples using actual Canadian data. The names of people and locations in the examples are as diverse as the population of Canada. We have converted most of the examples and questions to SI units; U.S. customary units are included where they are most commonly used by Canadians (for instance, in examples related to the trades). By using realistic Canadian examples, we hope to engage students and to help them understand the relevance of the material presented in each module.

As authors, we are committed to producing a textbook that emphasizes mathematical reasoning and problem-solving techniques. To this end, the problem sets are built on a wealth of real-life and real-data applications. Unique problems have been developed and incorporated into the exercise sets to help train students in data interpretation, mental mathematics, estimation, geometry and graphing, number sense, critical thinking, and decision making.

The **Mathematics Blueprint for Problem Solving** strengthens problem-solving skills by providing a consistent and interactive outline to help students organize their approach to problem solving. Once students fill in the blueprint, they can refer back to their plan as they do what is needed to solve the problem.

A dedicated **Study Skills** module opens the text, and **Developing Your Study Skills** boxes are integrated throughout the core modules to provide students with techniques for improving their study skills and succeeding in math courses.

Examples and exercises that incorporate a principle of geometry are marked with a triangle icon for easy identification. When students encounter mathematics in real-world publications, they often see data represented in a graph, chart, or table and are asked to make a reasonable conclusion based on the data presented. This emphasis on graphical interpretation is a continuing trend with today's expanding technology. In this text, students are asked to make simple interpretations, to solve medium-level problems, and to investigate challenging applied problems based on the data shown in a chart, graph, or table.

Students are given many opportunities to practise and review core concepts. Each module contains **Practice Problems**, **Quick Quizzes**, **Module Review Problems**, and two **How Am I Doing?** tests. The text is bookended by a **Diagnostic Pretest** and a **Practice Final Exam**.

We are confident that *Stepping It Up* offers Canadian college students the most effective mathematics learning resource available.