# Introduction

his book is intended for a variety of calculus students. Perhaps you want a supplement to your current calculus class or you're looking to brush up on a course you took long ago. Or maybe you're teaching yourself and need a comprehensive book of extra practice problems.

The 1,001 questions in this book cover calculus concepts that a high school student would encounter in a calculus course in preparation for the AP exam. It also covers most of the concepts that a calculus student could expect to see in the first two semesters of a three-semester calculus course. The types of questions are questions that I regularly assigned when teaching both as homework questions or are questions that a student could've expected to see on a quiz or test.

Jump around the book as you like. You can find a robust algebra and trigonometry review at the beginning of the book to make sure that you're prepared for calculus. The number-one reason students have difficulty in calculus is not calculus itself but having a weak background in algebra and trigonometry. If you're rusty on the fundamentals, spend time on those first two chapters before jumping into the rest of the text!

As with many things worth doing in life, there's no shortcut to becoming proficient in mathematics. However, by practicing the problems in this book, you'll be on your way to becoming a much stronger calculus student.

### What You'll Find

The 1,001 calculus practice problems in the book are divided into 15 chapters, with each chapter providing practice of the mechanical side of calculus or of applications of calculus. Some of the questions have a diagram or graph that you need in order to answer the question.

The end of the book provides thorough and detailed solutions to all the problems. If you get an answer wrong, try again before reading the solution! Knowing what *not* to do is often a great starting point in discovering the correct approach, so don't worry if you don't immediately solve each question; some problems can be quite challenging.

### Beyond the Book

This book provides a lot of calculus practice. If you'd also like to track your progress online, you're in luck! Your book purchase comes with a free one-year subscription to all 1,001 practice questions online. You can access the content whenever you want. Create your own question sets and view personalized reports that show what you need to study most.

#### What you'll find online

The online practice that comes free with the book contains the same 1,001 questions and answers that are available in the text. You can customize your online practice to focus on specific areas, or you can select a broad variety of topics to work on — it's up to you. The online program keeps track of the questions you get right and wrong so you can easily monitor your progress.

This product also comes with an online Cheat Sheet that helps you increase your odds of performing well in calculus. Check out the free Cheat Sheet at www.dummies.com/cheatsheet/1001calculus. (No PIN required. You can access this info before you even register.)

#### How to register

To gain access to the online version of all 1,001 practice questions in this book, all you have to do is register. Just follow these simple steps:

- 1. Find your PIN access code.
  - Print book users: If you purchased a hard copy of this book, turn to the inside of the front cover of this book to find your access code.
  - E-book users: If you purchased this book as an e-book, you can get your access code by registering your e-book at dummies.com/go/getaccess. Go to this website, find your book and click it, and answer the security question to verify your purchase. Then you'll receive an e-mail with your access code.
- 2. Go to learn.dummies.com and click Already have an Access Code?
- 3. Enter your access code and click Next.
- 4. Follow the instructions to create an account and establish your personal login information.

That's all there is to it! You can come back to the online program again and again — simply log in with the username and password you chose during your initial login. No need to use the access code a second time.



If you have trouble with the access code or can't find it, please contact Wiley Product Technical Support at 877-762-2974 or http://support.wiley.com.



Your registration is good for one year from the day you activate your access code. After that time frame has passed, you can renew your registration for a fee. The website gives you all the important details about how to do so.

## Where to Go for Additional Help

Calculus is hard, so don't become overwhelmed if a particular topic isn't immediately easy to you. This book has many practice problems of varying difficulty, so you can focus on those problems that are most appropriate for you.

In addition to getting help from your friends, teachers, or coworkers, you can find a variety of great materials online. If you have internet access, a simple search often turns up a treasure trove of information. You can also head to www.dummies.com to see the many articles and books that can help you in your studies.

1,001 Calculus Practice Problems For Dummies gives you just that — 1,001 practice questions and answers in order for you to practice your calculus skills. If you need more in-depth study and direction for your calculus courses, you may want to try out the following For Dummies products (or their companion workbooks):

- ✓ Calculus For Dummies: This book provides instruction parallel to the 1,001 calculus practice problems found here.
- ✓ Calculus II For Dummies: This book provides content similar to what you may encounter in a second-semester college calculus course.
- Pre-Calculus For Dummies: Use this book to brush up on the foundational skills and concepts you need for calculus solving polynomials, graphing functions, using trig identities, and the like.
- **Trigonometry For Dummies:** Try this book if you need a refresher on trigonometry.