# MATLAB Symbolic Algebra and Calculus Tools

*Cesar Perez Lopez*

[Click here](#) if your download doesn"t start automatically

# MATLAB Symbolic Algebra and Calculus Tools

*Cesar Perez Lopez*

**MATLAB Symbolic Algebra and Calculus Tools** Cesar Perez Lopez

MATLAB is a high-level language and environment for numerical computation, visualization, and programming. Using MATLAB, you can analyze data, develop algorithms, and create models and applications. The language, tools, and built-in math functions enable you to explore multiple approaches and reach a solution faster than with spreadsheets or traditional programming languages, such as C/C++ or Java.

*MATLAB Symbolic Algebra and Calculus Tools* introduces you to the MATLAB language with practical hands-on instructions and results, allowing you to quickly achieve your goals. Starting with a look at symbolic variables and functions, you will learn how to solve equations in MATLAB, both symbolically and numerically, and how to simplify the results. Extensive coverage of polynomial solutions, inequalities and systems of equations are covered in detail. You will see how MATLAB incorporates vector, matrix and character variables, and functions thereof. MATLAB is a powerful symbolic manipulator which enables you to factorize, expand and simplify complex algebraic expressions over all common fields (including over finite fields and algebraic field extensions of the rational numbers). With MATLAB you can also work with ease in matrix algebra, making use of commands which allow you to find eigenvalues, eigenvectors, determinants, norms and various matrix decompositions, among many other features. Lastly, you will see how you can use MATLAB to explore mathematical analysis, finding limits of sequences and functions, sums of series, integrals, derivatives and solving differential equation.

## What you'll learn

• How to use MATLAB to work with numeric and symbolic variables, including vector, matrix and character variables

• How to use MATLAB to handle polynomials and general algebraic expressions, factorizing, expanding and simplifying over a wide range of fields

• How to use MATLAB to work on matrix and vector functions, including all the standard matrix operations and decompositions

• How to solve equations and systems of equations using MATLAB

• How MATLAB can be used to explore mathematical analysis, by finding limits of sequences and functions, sums of series, integrals, derivatives, and solving differential equations

## Who this book is for

This book is for anyone who wants to work in a practical, hands-on manner on symbolic algebra or calculus problems with MATLAB. You'll already have a core understanding of undergraduate level calculus, algebra

and linear algebra, and have access to an installed version of MATLAB, but no previous experience of MATLAB is assumed.

## Table of Contents

⬇ **Download** MATLAB Symbolic Algebra and Calculus Tools ...pdf

🗐 **Read Online** MATLAB Symbolic Algebra and Calculus Tools ...pdf

**Download and Read Free Online MATLAB Symbolic Algebra and Calculus Tools Cesar Perez Lopez**

**From reader reviews:**

**Odis Hillyard:**

Why don't make it to be your habit? Right now, try to prepare your time to do the important action, like looking for your favorite e-book and reading a publication. Beside you can solve your long lasting problem; you can add your knowledge by the book entitled MATLAB Symbolic Algebra and Calculus Tools. Try to make book MATLAB Symbolic Algebra and Calculus Tools as your close friend. It means that it can to get your friend when you sense alone and beside that course make you smarter than ever. Yeah, it is very fortuned for you personally. The book makes you much more confidence because you can know anything by the book. So , let's make new experience and knowledge with this book.

**Merry Springs:**

The book MATLAB Symbolic Algebra and Calculus Tools will bring you to definitely the new experience of reading any book. The author style to explain the idea is very unique. In the event you try to find new book you just read, this book very ideal to you. The book MATLAB Symbolic Algebra and Calculus Tools is much recommended to you you just read. You can also get the e-book from official web site, so you can more easily to read the book.

**Robert Cobb:**

You are able to spend your free time to study this book this reserve. This MATLAB Symbolic Algebra and Calculus Tools is simple to deliver you can read it in the park, in the beach, train as well as soon. If you did not have much space to bring the particular printed book, you can buy the e-book. It is make you better to read it. You can save the particular book in your smart phone. Therefore there are a lot of benefits that you will get when you buy this book.

**Gale Gibbs:**

That guide can make you to feel relax. That book MATLAB Symbolic Algebra and Calculus Tools was bright colored and of course has pictures on the website. As we know that book MATLAB Symbolic Algebra and Calculus Tools has many kinds or genre. Start from kids until young adults. For example Naruto or Private eye Conan you can read and believe that you are the character on there. Therefore not at all of book are generally make you bored, any it offers up you feel happy, fun and unwind. Try to choose the best book for you personally and try to like reading in which.

# Download and Read Online MATLAB Symbolic Algebra and

# Calculus Tools Cesar Perez Lopez #V3FT9B42J6I

# Read MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez for online ebook

MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez books to read online.

## Online MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez ebook PDF download

### MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez Doc

**MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez Mobipocket**

**MATLAB Symbolic Algebra and Calculus Tools by Cesar Perez Lopez EPub**