

<<托马斯微积分（上册）>>

图书基本信息

书名：<<托马斯微积分（上册）>>

13位ISBN编号：9787040144246

10位ISBN编号：7040144247

出版时间：2004-7

出版时间：高等教育出版社

作者：[美] 吉尔当诺

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<托马斯微积分（上册）>>

前言

在我国已经加入WTO、经济全球化的今天，为适应当前我国高校各类创新人才培养的需要，大力推进教育部倡导的双语教学，配合教育部实施的“高等学校教学质量与教学改革工程”和“精品课程”建设的需要，高等教育出版社有计划、大规模地开展了海外优秀数学类系列教材的引进工作。

高等教育出版社和Pearson Education, John Wiley & Sons, McGraw-Hill, Thomson Learning等国外出版公司进行了广泛接触，经国外出版公司的推荐并在国内专家的协助下，提交引进版权总数100余种。收到样书后，我们聘请了国内高校一线教师、专家、学者参与这些原版教材的评介工作，并参考国内相关专业的课程设置和教学实际情况。

<<托马斯微积分（上册）>>

内容概要

托马斯微积分（英文版），ISBN：9787040144246，作者：（ ） Ross L.Finney等著

<<托马斯微积分（上册）>>

作者简介

作者：（美国）吉尔当诺 编者：（美国）芬尼

<<托马斯微积分(上册)>>

书籍目录

Preliminaries 1
 Lines 1 2
 Functions and Graphs 10 3
 Exponential Functions 24 4
 Inverse Functions and Logarithms 31 5
 Trigonometric Functions and Their Inverses 44 6
 Parametric Equations 60 7
 Modeling Change 67
 QUESTIONS TO GUIDE YOUR REVIEW 76
 PRACTICE EXERCISES 77
 ADDITIONAL EXERCISES : THEORY . EXAMPS . APPUCATIONS 801
 Limits and Continuity 1 . 1 Rates of Change and Limi85 1 . 2 Finding Limiand One-Sided Limits 99 1 . 3 Limilnvolving Infinity 112 1 . 4 Continuity 123 1 . 5 Tangent Lines 134
 QUESTIONS TO GUIDE YOUR REVIEW 141
 PRACTICE EXERCISES 142
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS 1432
 DeriVatives 2 . 1 The Derivative as a Function 147 2 . 2 The Derivative as a Rate of Change 160 2 . 3 Derivatives of Products . Quotients . and Negative Powers 173 2 . 4 Derivatives of Trigonometric Functions 179 2 . 5 The Chain Rule and Parametric Equations 187 2 . 6 Implicit Difierentiation 198 2 . 7 Related Rates 207
 QUESTIONS TO GUIDE YOUR REVIEW 216
 PRACTICE EXERCISES 217
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPUCATIONS 2213
 Applications of Derivatives 3 . 1 Extreme Values of Functions 225 3 . 2 The Mcan Value Theorem and Difierential Equations 237 3 . 3 The Shape of a Graph 245 3 . 4 Graphical Solutions of Autonomous Differential Equations 257 3 . 5 Modeling and Optimization 266 3 . 6 Linearization and Differentials 283 3 . 7 Newton ' S Method 297
 QUESTIONS TO GUIDE YOUR REVIEW 305
 PRACTICE EXERCISES 305
 ADDITIONAL EXERCISES : THEORY,EXAMPLES . APPLICATIONS 3094
 Integration 4 . 1 Indefinite Integrals,Differential Equations . and Modeling 313 4 . 2 Integral Rules ; Integration by Substitution 322 4 . 3 Estimating with Finite Sums 329 4 . 4 Ricmann Sums and Definite Integrals 340 4 . 5 The Mcan Value and Fundamental Theorems 351 4 . 6 SubStitution in Definite Integrals 364 4 . 7 NumericalIntegration 373
 QUESTIONS TO GUIDE YOUR REVIEW 384
 PRACTICE EXERCISES 385
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS 3895
 Applications of Integrals 5 . 1 Volumes by Slicing and Rotation About an Axis 393 5 . 2 Modeling Volume Using Cylindrical Shells 406 5 . 3 Lengths of Plane Curves 413 5 . 4 Springs . Pumping . and Lifting 421 5 . 5 Fluid Forces 432 5 . 6 Moments and Centers of Mass 439
 QUESTIONS TO GUIDE YOUR REVIEW 451
 PRACTICE EXERCISES 451
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS 4546
 Transcendental Functions and Differential Equations 6 . 1 Logarithms 457 6 . 2 Exponential Functions 466 6 . 3 D——e|rivatives of Inverse Trigonometric Functions ; Integrals 477 6 . 4 First . Order Separable Differential Equations 485 6 . 5 Linear FirSt . Order Differential Equations 499 6 . 6 Euler ' S Method ; Poplulation Models 507 6 . 7 Hyperbolic Functions 520
 QUESTIONS TO GUIDE YOUR REVIEW 530
 PRACTICE EXERCISES 531
 ADDmONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS 5357
 Integration Techniques , L'H6pital ' s Rule,and Improper Integrals 7 . 1 Basic Integration Formulas 539 7 . 2 Integration by Parts 546 7 . 3 Partial Fractions 555 7,4 Trigonometric Substitutions 565 7 . 5 Integral Tables . Computer Algebra Systems . and Monte Cario Integration 570 7 . 6 L'HSpitarS Rule 578 7 . 7 Improper Integrals 586
 QUESTIONS TO GUIDE YOUR REVIEW 600
 PRACTICE EXERCISES 601
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS 6038
 Infinite Series 8 . 1 Limis of Sequences of Numbers 608 8 . 2 Subsequences . Bounded Sequences . and Picard'S Method 619 8 . 3 Infinite Series 627 8 . 4 Series of Nonnegative Terms 1639 8 . 5 Alternating Series. Absolute and Conditional Convergence 651 8 . 6 Power Series 660 8 . 7 Taylor and Maclaurin Series 669 8 . 8 Applications of Power Series 683 8 . 9 Fourier Series 691 8 . 10 Fourier Cosine and Sine Series 698
 QUESTIONS TO GUIDE YOUR REVIEW 707
 PRACTICE EXERCISES 708
 ADDITIONAL EXERCISES : THEORY,EXAMPS . APPLICATIONS 7119
 Vectors in the Plane and Polar Functions 9 . 1 Vectors in the Plane 717 9 . 2 Dot Products 728 9 . 3 Vector-Valued Functions 738 9 . 4 Modeling Projectile Motion 749 9 . 5 Polar Coordinates and Graphs 761 9 . 6 Calculus of Polar Curyes 770
 QUESTIONS TO GUIDE YOUR REVIEW 780
 PRACTICE EXERCISES 780
 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPUCATIONS 78410
 Vectors and M0tion in Space 10 . 1 Cartesian(Rectangular)Coordinates and

<<托马斯微积分 (上册)>>

Vectors in Space 787 10 . 2 Dot and Cross Products 796 10 . 3 Lines and Planes in Space 807 10 . 4
cylinders and Quadric Surfaces 816 10 . 5 Vector-Valued Functions and Space Curves 825 10 . 6 Arc Length
and the Unit Tangent Vector T 838 10 . 7 The TNB Frame ; Tangential and Normal Components of
Acceleration 10 . 8 Planetary Motion and Satellites 857 QUESTIONS TO GUIDE YOUR REVIEW 866
PRACTICE EXERCISES 867 ADDITIONAL EXERCISES : THEORY . EXAMPLES . APPLICATIONS
87011 Multivariable Functions and their Derivatives 11 . 1 Functions of Several Variables 873 11 . 2 Limits
and Continuity in Higher Dimensions 882 11 . 3 Partial Derivatives 890 11 . 4 The Chain Rule 902 11 . 5
Directional Derivatives . Gradient Vectors . and Tangent Planes 911 11 . 6 Linearization and Differentials 925
11 . 7 Extreme Values and Saddle Points 936.....12 Multiple Integrals13 Integration in Vector FieldsAppendices

<<托马斯微积分 (上册)>>

章节摘录

插图：

<<托马斯微积分（上册）>>

编辑推荐

《托马斯微积分》(上)(第10版影印版)与我国现行通用高等数学教材相比,其基本内容和结构框架有着许多近似之处,但在题材选取和处理上又有更多不同特色,尤其是,突出应用和数学建模,重视数值计算和程序应用。

在适时引进现代数学和新学科知识等方面,更有不少精彩之处。

<<托马斯微积分（上册）>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>