

# Differential Equations and Boundary Value Problems: Computing and Modeling Edition 5

### Edwards / Penney / Calvis

### Binding Paperback | Page Count 800

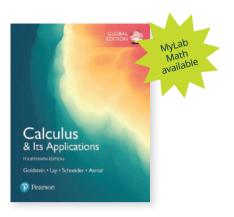
For introductory courses in differential equations

This best-selling text blends the traditional algebra problem-solving skills with the conceptual development and geometric visualization of a modern differential equations course that is essential to science and engineering students. It reflects the new qualitative approach that is altering the learning of elementary differential equations, including the wide availability of scientific computing environments like Maple, Mathematica, and MATLAB. Its focus balances the traditional manual methods with the new computer-based methods that illuminate qualitative phenomena and make accessible a wider range of more realistic applications. Seldom-used topics have been trimmed and new topics added: it starts and ends with discussions of mathematical modeling of real-world phenomena, evident in figures, examples, problems, and applications throughout the text.

### **Table of Contents**

- 1. First-Order Differential Equations
- 2. Mathematical Models and Numerical Methods
- 3. Linear Equations of Higher Order
- 4. Introduction to Systems of Differential Equations
- 5. Linear Systems of Differential Equations
- 6. Nonlinear Systems and Phenomena
- 7. Laplace Transform Methods 8. Power Series Methods
- 9. Fourier Series Methods and Partial Differential Equations
- 10. Eigenvalue Methods and Boundary Value Problems

**ISBN** 9781292108773 | **PUB Date** 9/10/2017



## Calculus & Its Applications Edition 14

### Goldstein / Lay / Schneider / Asmar

#### Binding Paperback | Page Count 664

For one- or two-semester courses in Calculus for students majoring in business, social sciences, and life sciences

Calculus & Its Applications builds intuition with key concepts of calculus before the analytical material. For example, the authors explain the derivative geometrically before they present limits, and they introduce the definite integral intuitively via the notion of net change before they discuss Riemann sums. The strategic organization of topics makes it easy to adjust the level of theoretical material covered. The significant applications introduced early in the course serve to motivate students and make the mathematics more accessible. Another unique aspect of the text is its intuitive use of differential equations to model a variety of phenomena in Chapter 5, which addresses applications of exponential and logarithmic functions.

Time-tested, comprehensive exercise sets are flexible enough to align with each instructor's needs, and new exercises and resources in MyLab™ Math help develop not only skills, but also conceptual understanding, visualization, and applications. The 14th Edition features updated exercises, applications, and technology coverage, presenting calculus in an intuitive yet intellectually satisfying way.

### **Table of Contents**

- 0. Functions
- 1. The Derivative
- 2. Applications of the Derivative
- 3. Techniques of Differentiation
- 4. The Exponential and Natural Logarithm Functions
- 5. Applications of the Exponential and Natural Logarithm Functions
- 6. The Definite Integral
- 7. Functions of Several Variables
- 8. The Trigonometric Functions
- 9. Techniques of Integration
- 10. Differential Equations
- 11. Taylor Polynomials and Infinite Series
- 12. Probability and Calculus

ISBN 9781292229041 | PUB Date 4/23/2018



### Fundamentals of Differential Equations, Global Edition **Edition 9**

Nagle / Saff / Snider

Binding Paperback | Page Count 720

ISBN 9781292240992 | PUB Date 2/19/2018

For one-semester sophomore- or junior-level courses in Differential Equations

An introduction to the basic theory and applications of differential equations

Fundamentals of Differential Equations presents the basic theory of differential equations and offers a variety of modern applications in science and engineering. This flexible text allows instructors to adapt to various course emphases (theory, methodology, applications, and numerical methods) and to use commercially available computer software. For the first time, MyLab™ Math is available for this text, providing online homework with immediate feedback, the complete eText, and more.

### **Table of Contents**

- 1. Introduction
- 1.1 Background
- 1.2 Solutions and Initial Value Problems
- 1.3 Direction Fields
- 1.4 The Approximation Method of Euler
- 2. First-Order Differential Equations
- 2.1 Introduction: Motion of a Falling Body
- 2.2 Separable Equations
- 2.3 Linear Equations
- 2.4 Exact Equations
- 2.5 Special Integrating Factors
- 2.6 Substitutions and Transformations
- 3. Mathematical Models and Numerical Methods Involving First Order Equations
- 3.1 Mathematical Modeling
- 3.2 Compartmental Analysis
- 3.3 Heating and Cooling of Buildings
- 3.4 Newtonian Mechanics
- 3.5 Electrical Circuits
- 3.6 Numerical Methods: A Closer Look At Euler's Algorithm
- 3.7 Higher-Order Numerical Methods: Taylor and Runge-Kutta
- 4. Linear Second-Order Equations
- 4.1 Introduction: The Mass-Spring Oscillator
- 4.2 Homogeneous Linear Equations: The General Solution
- 4.3 Auxiliary Equations with Complex Roots
- 4.4 Nonhomogeneous Equations: The Method of Undetermined Coefficients
- The Superposition Principle and Undetermined Coefficients Revisited
- 4.6 Variation of Parameters
- 4.7 Variable-Coefficient Equations
- 4.8 Qualitative Considerations for Variable-Coefficient and Nonlinear Equations
- 4.9 A Closer Look at Free Mechanical Vibrations
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- 5. Introduction to Systems and Phase Plane Analysis
- 5.1 Interconnected Fluid Tanks
- 5.2 Differential Operators and the Elimination Method for Systems
- 5.3 Solving Systems and Higher-Order **Equations Numerically**

- 5.4 Introduction to the Phase Plane
- 5.5 Applications to Biomathematics: Epidemic and Tumor Growth Models
- 5.6 Coupled Mass-Spring Systems
- 5.7 Electrical Systems
- 5.8 Dynamical Systems, Poincaré Maps, and Chaos
- 6. Theory of Higher-Order Linear Differential Equations
- Basic Theory of Linear Differential Equations
- 6.2 Homogeneous Linear Equations with Constant Coefficients
- 6.3 Undetermined Coefficients and the Annihilator Method
- 6.4 Method of Variation of Parameters
- 7. Laplace Transforms
- 7.1 Introduction: A Mixing Problem
- 7.2 Definition of the Laplace Transform
- 7.3 Properties of the Laplace Transform
- 7.4 Inverse Laplace Transform
- 7.5 Solving Initial Value Problems
- 7.6 Transforms of Discontinuous Functions
- 7.7 Transforms of Periodic and Power **Functions**
- 7.8 Convolution
- 7.9 Impulses and the Dirac Delta Function
- 7.10 Solving Linear Systems with Laplace Transforms
- 8. Series Solutions of Differential Equations
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- 8.2 Power Series and Analytic Functions
- 8.3 Power Series Solutions to Linear **Differential Equations**
- 8.4 Equations with Analytic Coefficients
- 8.5 Cauchy-Euler (Equidimensional) Equations
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- 8.7 Finding a Second Linearly Independent Solution
- 8.8 Special Functions
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- 9.2 Review 1: Linear Algebraic Equations
- 9.3 Review 2: Matrices and Vectors
- 9.4 Linear Systems in Normal Form
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- 9.6 Complex Eigenvalues

- 9.7 Nonhomogeneous Linear Systems
- 9.8 The Matrix Exponential Function
- 10. Partial Differential Equations
- 10.1 Introduction: A Model for Heat Flow
- 10.2 Method of Separation of Variables
- 10.3 Fourier Series
- 10.4 Fourier Cosine and Sine Series
- 10.5 The Heat Equation
- 10.6 The Wave Equation
- 10.7 Laplace's Equation
- 11. Eigenvalue Problems and Sturm-Liouville Equations
- .1 Introduction: Heat Flow in a Nonuniform Wire
- 11.2 Eigenvalues and Eigenfunctions
- 11.3 Regular Sturm-Liouville Boundary Value Problems
- .4 Nonhomogeneous Boundary Value Problems and the Fredholm Alternative
- 11.5 Solution by Eigenfunction Expansion
- 11.6 Green's Functions
- .7 Singular Sturm-Liouville Boundary Value Problems.
- 11.8 Oscillation and Comparison Theory
- 12. Stability of Autonomous Systems
- 12.1 Introduction: Competing Species
- 12.2 Linear Systems in the Plane
- 12.3 Almost Linear Systems
- 12.4 Energy Methods 12.5 Lyapunov's Direct Method
- 12.6 Limit Cycles and Periodic Solutions
- 12.7 Stability of Higher-Dimensional Systems
- 13. Existence and Uniqueness Theory
- 13.1 Introduction: Successive Approximations 13.2 Picard's Existence and Uniqueness
- Theorem 13.3 Existence of Solutions of Linear Equations
- 13.4 Continuous Dependence of Solutions
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- Appendix B Newton's Method
- Appendix C Simpson's Rule
- Appendix D Cramer's Rule
- Appendix E Method of Least Squares Appendix F Runge-Kutta Procedure for n Equations
- Appendix G Software for Analyzing Differential Equations



# Thomas' Calculus Edition 14

#### Hass / Heil / Weir

#### Binding Paperback | Page Count 1224

For three-semester or four-quarter courses in Calculus for students majoring in mathematics, engineering, or science

Thomas' Calculus helps students reach the level of mathematical proficiency and maturity you require, but with support for students who need it through its balance of clear and intuitive explanations, current applications, and generalized concepts. In the 14th Edition, new co-author Christopher Heil (Georgia Institute of Technology) partners with author Joel Hass to preserve what is best about Thomas' time-tested text while reconsidering every word and every piece of art with today's students in mind.

### **Table of Contents**

- 1. Functions
- 2. Limits and Continuity
- 3. Derivatives
- 4. Applications of Derivatives
- 5. Integrals
- 6. Applications of Definite Integrals
- 7. Transcendental Functions
- 8. Techniques of Integration
- 9. First-Order Differential Equations
- 10. Infinite Sequences and Series
- 11. Parametric Equations and Polar Coordinates
- 12. Vectors and the Geometry of Space
- 13. Vector-Valued Functions and Motion in Space
- 14. Partial Derivatives
- 15. Multiple Integrals
- 16. Integrals and Vector Fields
- 17. Second-Order Differential Equations

### **Appendices**

- 1. Real Numbers and the Real Line
- 2. Mathematical Induction
- 3. Lines, Circles, and Parabolas
- 4. Proofs of Limit Theorems
- 5. Commonly Occurring Limits
- 6. Theory of the Real Numbers
- 7. Complex Numbers
- 8. The Distributive Law for Vector Cross Products
- 9. The Mixed Derivative Theorem and the Increment Theorem

**ISBN** 9781292253220 | **PUB Date** 3/23/2017



### Thomas' Calculus: Early Transcendentals, 14/e Edition 14

### Hass / Heil / Weir

### Binding Paperback | Page Count 1232

For three-semester or four-quarter courses in Calculus for students majoring in mathematics, engineering, or science

Thomas' Calculus: Early Transcendentals helps students reach the level of mathematical proficiency and maturity you require, but with support for students who need it through its balance of clear and intuitive explanations, current applications, and generalized concepts.

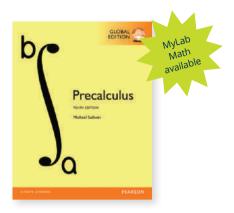
### **Table of Contents**

- 1. Functions
- 2. Limits and Continuity
- 3. Derivatives
- 4. Applications of Derivatives
- 5. Integrals
- 6. Applications of Definite Integrals
- 7. Integrals and Transcendental Functions
- 8. Techniques of Integration
- 9. Infinite Sequences and Series
- 10. Parametric Equations and Polar Coordinates
- 11. Vectors and the Geometry of Space
- 12. Vector-Valued Functions and Motion in Space
- 13. Partial Derivatives
- 14. Multiple Integrals
- 15. Integrals and Vector Fields
- 16. First-Order Differential Equations

#### **Appendices**

- 1. Real Numbers and the Real Line AP-1
- 2 Graphing with Software
- 3. Mathematical Induction AP-6
- 4 Lines, Circles, and Parabolas AP-9
- 5 Proofs of Limit Theorems AP-19
- 6 Commonly Occurring Limits AP-22 7 Theory of the Real Numbers AP-23
- 8 Complex Numbers AP-26
- 9. Probability
- 10. The Distributive Law for Vector Cross Products AP-34
- 11. The Mixed Derivative Theorem and the Increment Theorem

ISBN 9781292253114 | PUB Date 4/2/2018



# Precalculus Edition 10

### Sullivan

#### Binding Paperback | Page Count 1176

Mike Sullivan's time-tested approach in Precalculus focuses students on the fundamental skills they need for the course: preparing for class, practicing with homework, and reviewing the concepts. The 10th Edition has evolved to meet today's course needs.

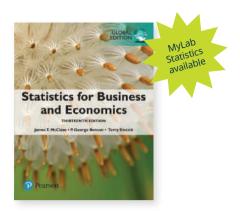
### **Table of Contents**

- 1. Graphs
- 2. Functions and Their Graphs
- 3. Linear and Quadratic Functions
- 4. Polynomial and Rational Functions
- 5. Exponential and Logarithmic Functions
- 6. Trigonometric Functions
- 7. Analytic Trigonometry
- 8. Applications of Trigonometric Functions
- 9. Polar Coordinates; Vectors
- 10. Analytic Geometry
- 11. Systems of Equations and Inequalities
- 12. Sequences; Induction; the Binomial Theorem
- 13. Counting and Probability
- 14. A Preview of Calculus: The Limit, Derivative, and Integral of a Function

Appendix A: Review

Appendix B: Graphing Utilities

ISBN 9781292121772 | PUB Date 4/1/2018



# Statistics for Business and Economics Edition 13

#### Mcclave / Benson / Sincich

Binding Paperback | Page Count 888

For courses in Introductory Business Statistics

Now in its 13th Edition, Statistics for Business and Economics introduces statistics in the context of contemporary business. Emphasizing statistical literacy in thinking, the text applies its concepts with real data and uses technology to develop a deeper conceptual understanding. Examples, activities, and case studies foster active learning in the classroom while emphasizing intuitive concepts of probability and teaching students to make informed business decisions. The 13th Edition continues to highlight the importance of ethical behavior in collecting, interpreting, and reporting on data, while also providing a wealth of new and updated exercises and case studies.

#### **Table of Contents**

- 1. Statistics, Data, and Statistical Thinking
- 2. Methods for Describing Sets of Data
- 3. Probability
- 4. Random Variables and Probability Distributions
- 5. Sampling Distributions
- 6. Inferences Based on a Single Sample: Estimation with Confidence Intervals
- 7. Inferences Based on a Single Sample: Tests of Hypotheses
- 8. Inferences Based on Two Samples: Confidence Intervals and Tests of Hypotheses
- 9. Design of Experiments and Analysis of Variance
- 10. Categorical Data Analysis
- 11. Simple Linear Regression
- 12. Multiple Regression and Model Building
- 13. Methods for Quality Improvement: Statistical Process Control (Available Online)
- 14. Time Series: Descriptive Analyses, Models, and Forecasting (Available Online)
- 15. Nonparametric Statistics (Available Online)

ISBN 9781292227085 | PUB Date 2/3/2018

### **Mathematics & Statistics**



## Elementary Statistics: Picturing the World Edition 7

### Larson / Farber

Binding Paperback | Page Count 712

For courses in Introductory Statistics (algebra-based)

Elementary Statistics: Picturing the World makes statistics approachable with stepped-out instruction, extensive reallife examples and exercises, and a design that fits content to each page to make the material more digestible. The text's combination of theory, pedagogy, and design helps students understand concepts and use statistics to describe and think about the world. The 7th Edition incorporates a thorough update of key features, examples, and exercises.

### **Table of Contents**

- I. DESCRIPTIVE STATISTICS
- 1. Introduction to Statistics
- 2. Descriptive Statistics
- 3. Probability
- 4. Discrete Probability Distributions
- 5. Normal Probability Distributions
- 6. Confidence Intervals
- 7. Hypothesis Testing with One Sample
- 8. Hypothesis Testing with Two Samples
- IV. MORE STATISTICAL INFERENCE
- 9. Correlation and Regression
- 10. Chi-Square Tests and the F-Distribution

**APPENDICES** 

Appendix A: Alternative Presentation of the Standard Normal Distribution

Appendix B: Tables

ISBN 9781292260464 | PUB Date 1/13/2018



## **Statistics** Edition 13

#### Mcclave / Sincich

Binding Paperback | Page Count 896

For courses in introductory statistics

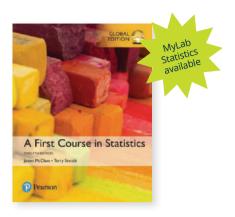
Classic, yet contemporary; theoretical, yet applied. McClave & Sincich's Statistics gives you the best of both worlds. This text offers a trusted, comprehensive introduction to statistics that emphasizes inference and integrates real data throughout. The authors stress the development of statistical thinking, the assessment of credibility, and value of the inferences made from data. This new edition is extensively revised with an eye on clearer, more concise language throughout the text and in the exercises

Ideal for one- or two-semester courses in introductory statistics, this text assumes a mathematical background of basic algebra. Flexibility is built in for instructors who teach a more advanced course, with optional footnotes about calculus and the underlying theory.

### Table of Contents

- 1. Statistics, Data, and Statistical Thinking
- 2. Methods for Describing Sets of Data
- 3. Probability
- 4. Discrete Random Variables
- 5. Continuous Random Variables
- 6. Sampling Distributions
- 7. Inferences Based on a Single Sample: Estimation with Confidence Intervals
- 8. Inferences Based on a Single
- 9. Inferences Based on Two Samples: Confidence Intervals and Tests of Hypotheses
- 10. Analysis of Variance: Comparing More than Two Means
- 11. Simple Linear Regression
- 12. Multiple Regression and Model Building
- 13. Categorical Data Analysis
- 14. Nonparametric Statistics (available online)

ISBN 9781292161556 | PUB Date 4/1/2018



# A First Course in Statistics Edition 12

### Mcclave / Sincich

Binding Paperback | Page Count 640

For courses in introductory statistics

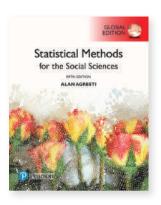
Classic, yet contemporary; theoretical, yet applied–McClave & Sincich's A First Course in Statistics gives you the best of both worlds. This text offers a trusted, comprehensive introduction to statistics that emphasizes inference and integrates real data throughout. The authors stress the development of statistical thinking, the assessment of credibility, and value of the inferences made from data. This new edition is extensively revised with an eye on clearer, more concise language throughout the text and in the exercises.

Ideal for one- or two-semester courses in introductory statistics, this text assumes a mathematical background of basic algebra. Flexibility is built in for instructors who teach a more advanced course, with optional footnotes about calculus and the underlying theory.

### **Table of Contents**

- 1. Statistics, Data, and Statistical Thinking
- 2. Methods for Describing Sets of Data
- 3. Probability
- 4. Discrete Random Variables
- 5. Continuous Random Variables
- 6. Sampling Distributions
- 7. Inferences Based on a Single Sample: Estimation with Confidence Intervals
- 8. Inferences Based on a Single
- 9. Inferences Based on Two Samples: Confidence Intervals and Tests of Hypotheses
- 10. Analysis of Variance: Comparing More than Two Means
- 11. Simple Linear Regression
- 12. Multiple Regression and Model Building
- 13. Categorical Data Analysis
- 14. Nonparametric Statistics (available online)

ISBN 9781292165417 | PUB Date 4/1/2018



# Statistical Methods for the Social Sciences Edition 5

### Agresti

Binding Paperback | Page Count 568

For courses in Statistical Methods for the Social Sciences

Statistical Methods for the Social Sciences introduces statistical methods to students majoring in social science disciplines. With an emphasis on concepts and applications, this book assumes no previous knowledge of statistics and only a minimal mathematical background. It contains sufficient material for a two-semester course. The 5th Edition uses examples and exercises with a variety of real data. It includes more illustrations of statistical software for computations and takes advantage of the outstanding applets to explain key concepts, such as sampling distributions and conducting basic data analyses. It continues to downplay mathematics (often a stumbling block for students) while avoiding reliance on an overly simplistic recipe-based approach to statistics.

### **Table of Contents**

Introduction

Sampling and Measurement

**Descriptive Statistics** 

**Probability Distributions** 

Statistical Inference: Estimation

Statistical Inference: Significance Tests

Comparison of Two Groups

Analyzing Association between Categorical Variables

Linear Regression and Correlation

Introduction to Multivariate Relationships

Multiple Regression and Correlation

Regression with Categorical Predictors: Analysis of Variance Methods

Multiple Regression with Quantitative and Categorical Predictors

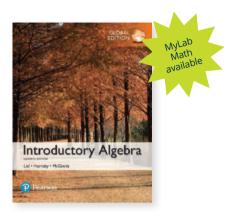
Model Building with Multiple Regression

Logistical Regression: Modeling Categorical Responses

Appendix: R, Stata, SPSS, and SAS for Statistical Analyses

Answers to Select Odd-Numbered Exercises

**ISBN** 9781292220314 | **PUB Date** 4/1/2018



# Introductory Algebra, Global Edition Edition 11

### Lial / Hornsby / Mcginnis

Binding Paperback | Page Count 752

For courses in Beginning Algebra

The Lial Series has helped thousands of students succeed in developmental mathematics by combining clear, concise writing and examples with carefully crafted exercises to support skill development and conceptual understanding. Written with the developmental learner in mind, the precise, accessible writing style delivers help precisely when needed. The revision of the series faithfully continues to support students with enhancements in the text and Pearson MyLab Mathematics course to encourage conceptual understanding beyond skills and procedures. Student-oriented features throughout the text and Pearson MyLab Mathematics, including the Relating Concepts exercises, Guided Solutions, Test Your Word Power, and the Lial Video Library, make the Lial series one of the most well-rounded and student-friendly on the market.

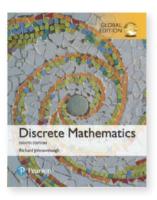
### **Table of Contents**

- R. Prealgebra Review
- R.1 Fractions
- R.2 Decimals and Percents

Study Skills Using Your Math Text

- 1. The Real Number System
- 2. Equations, Inequalities, and Applications
- 3. Graphs of Linear Equations and Inequalities in Two Variables
- 4. Systems of Linear Equations and Inequalities
- 5. Exponents and Polynomials
- 6. Factoring and Applications
- 7. Rational Expressions and Applications
- 8. Roots and Radicals
- 9. Quadratic Equations

ISBN 9781292246123 | PUB Date 4/1/2018



## Discrete Mathematics, 8/e Edition 8

### Johnsonbaugh

Binding Paperback | Page Count 712

For one- or two-term introductory courses in discrete mathematics

With nearly 4,500 exercises, Discrete Mathematics provides ample opportunities for students to practice, apply, and demonstrate conceptual understanding. Exercise sets feature a large number of applications, especially applications to computer science. The almost 650 worked examples provide ready reference for students as they work. A strong emphasis on the interplay among the various topics serves to reinforce understanding. The text models various problem-solving techniques in detail, then provides opportunity to practice these techniques. The text also builds mathematical maturity by emphasizing how to read and write proofs. Many proofs are illustrated with annotated figures and/or motivated by special Discussion sections. The side margins of the text now include directions to relevant applications, extensions, and computer programs on the textbook website.

### Table of Contents

- 1. Sets and Logic
- 2. Proofs
- 3. Functions, Sequences, and Relations
- 4. Algorithms
- 5. Introduction to Number Theory
- 6. Counting Methods and the Pigeonhole Principle
- 7. Recurrence Relations
- 8. Graph Theory
- 9. Trees
- 10. Network Models
- 11. Boolean Algebras and Combinatorial Circuits
- 12. Automata, Grammars, and Languages
- 13. Computational Geometry

**Appendix** 

- A. Matrices
- B. Algebra Review
- C. Pseudocode

References

Hints and Solutions to Selected Exercises

ISBN 9781292233703 | PUB Date 11/13/2018



### Calculus for Business, Economics, Life Sciences, and Social Sciences Edition 14

### Barnett / Ziegler / Byleen / Stocker

Binding Paperback | Page Count 800

For two-semester courses in Calculus

Calculus for Business, Economics, Life Sciences, and Social Sciences, 14th Edition offers more built-in guidance than any other text in its field (with special emphasis on applications and prerequisite skills) and a host of student-friendly features to help students catch up or learn on their own. The text's emphasis on helping students "get the idea" is enhanced in the new edition by a design refresh and updated data and applications.

### **Table of Contents**

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Diagnostic Prerequisite Test

- 1. Functions and Graphs
- 2. Limits and the Derivative
- 3. Additional Derivative Topics
- 4. Graphing and Optimization
- 5. Integration
- 6. Additional Integration Topics
- 7. Multivariable Calculus
- 8. Differential Equations
- 9. Taylor Polynomials and Infinite Series
- 10. Probability and Calculus

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Appendix B: Special Topics (online)

- B.1 Sequences, Series, and Summation Notation
- B.2 Arithmetic and Geometric Sequences
- **B.3 Binomial Theorem**
- B.4 Interpolating Polynomials and Divided Differences

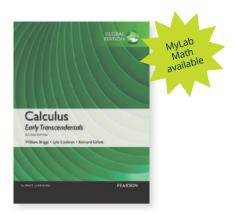
Appendix C: Integration Using Tables

Answers

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Index of Applications

ISBN 9781292266152 | PUB Date 2/3/2018



# Calculus: Early Transcendentals Edition 2

### Briggs / Cochran / Gillett

Binding Paperback | Page Count 1320

For a three-semester or four-quarter calculus course covering single variable and multivariable calculus for mathematics, engineering, and science majors

This book retains the best of the first edition while introducing important advances and refinements. Authors Briggs, Cochran, and Gillett build from a foundation of meticulously crafted exercise sets, then draw students into the narrative through writing through examples that are stepped out and thoughtfully annotated, and figures that are designed to teach rather than supplement the narrative.

### **Table of Contents**

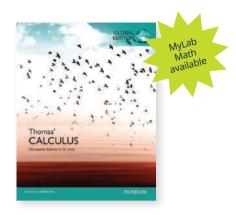
- 1. Functions
- 2. Limits
- 3. Derivatives
- 4. Applications of the Derivative
- 5. Integration
- 6. Applications of Integration
- 7. Integration Techniques
- 8. Sequences and Infinite Series
- 9. Power Series
- 10. Parametric and Polar Curves
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- 12. Functions of Several Variables
- 13. Multiple Integration
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Appendix B. Proofs of Selected Theorems

- D1. Differential Equations (online)
- D1.1 Basic Ideas
- D1.2 Direction Fields and Euler's Method
- D1.3 Separable Differential Equations
- D1.4 Special First-Order Differential Equations
- D1.5 Modeling with Differential Equations
- D2. Second-Order Differential Equations (online)
- D2.1 Basic Ideas
- D2.2 Linear Homogeneous Equations
- D2.3 Linear Nonhomogeneous Equations
- D2.4 Applications
- D2.5 Complex Forcing Functions

ISBN 9781292062310 | PUB Date 4/1/2018



### Thomas' Calculus SI Edition 13

### Thomas / Weir / Hass

Binding Paperback | Page Count 1192

This text is designed for a three-semester or four-quarter calculus course (math, engineering, and science majors).

Calculus, 13th Edition, introduces students to the intrinsic beauty of calculus and the power of its applications. For more than half a century, this text has been revered for its clear and precise explanations, thoughtfully chosen examples, superior figures, and time-tested exercise sets. With this new edition, the exercises were refined, updated, and expanded.

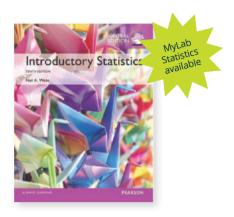
#### **Table of Contents**

- 1 Functions
- 2 Limits and Continuity
- 3 Derivatives
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- 5 Integrals
- 6 Applications of Definite Integrals
- 7 Transcendental Functions
- 8 Techniques of Integration
- 9 First-Order Differential Equations
- 10 Infinite Sequences and Series
- 11 Parametric Equations and Polar Coordinates
- 12 Vectors and the Geometry of Space
- 13 Vector-Valued Functions and Motion in Space
- 14 Partial Derivatives
- 15 Multiple Integrals
- 16 Integrals and Vector Fields
- 17 Second-Order Differential Equations online

#### **Appendices**

- A.1 Real Numbers and the Real Line
- A.2 Mathematical Induction
- A.3 Lines, Circles, and Parabolas
- A.4 Proofs of Limit Theorems
- A.5 Commonly Occurring Limits
- A.6 Theory of the Real Numbers
- A.7 Complex Numbers
- A.8 The Distributive Law for Vector Cross Products
- A.9 The Mixed Derivative Theorem and the Increment Theorem

ISBN 9781292089799 | PUB Date 2/25/2018



# Introductory Statistics Edition 10

#### Weiss

Binding Paperback | Page Count 856

For introductory statistics courses

Weiss's Introductory Statistics, 10th Edition emphasizes statistical reasoning and critical thinking. Comprehensive in its coverage, Weiss's meticulous style offers careful, detailed explanations to ease the learning process. With more than 1,000 data sets and over 3,000 exercises, this text takes a data-driven approach that encourages students to apply their knowledge and develop statistical understanding.

#### **Table of Contents**

PART I: Introduction

1. The Nature of Statistics

PART II: Descriptive Statistics

- 2. Organizing Data
- 3. Descriptive Measures

PART III: Probability, Random Variables, and Sampling Distributions

- 4. Probability Concepts
- 5. Discrete Random Variables
- 6. The Normal Distribution
- 7. The Sampling Distribution of the Sample Mean

PART IV: Inferential Statistics

- 8. Confidence Intervals for One Population Mean
- 9. Hypothesis Tests for One Population Mean
- 10. Inferences for Two Population Means
- 11. Inferences for Population Standard Deviations
- 12. Inferences for Population Proportions
- 13. Chi-Square Procedures

PART V: Regression, Correlation, and ANOVA

- 14. Descriptive Methods in Regression and Correlation
- 15. Inferential Methods in Regression and Correlation
- 16. Analysis of Variance (ANOVA)

PART VI: Multiple Regression and Model Building; Experimental Design and ANOVA

MODULE A: Multiple Regression Analysis

MODULE B: Model Building in Regression

MODULE C: Design of Experiments and Analysis of Variance

Answers to Selected Exercises

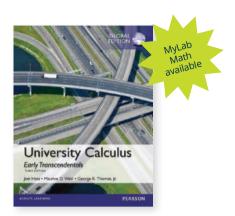
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Appendix A: Statistical Tables

Appendix B: Answers to Selected Exercises

ISBN 9781292099729 | PUB Date 4/1/2018

### **Mathematics & Statistics**



## *University Calculus, Early Transcendentals*Edition 3

Hass / Weir / Thomas

Binding Paperback | Page Count 1076

ISBN 9781292104034 | PUB Date 2/25/2018

For three-semester or four-quarter courses in calculus for math, science, and engineering majors

University Calculus, Early Transcendentals, 3rd Edition helps students generalize and apply the key ideas of calculus through clear and precise explanations, thoughtfully chosen examples, meticulously crafted figures, and superior exercise sets. This text offers the right mix of basic, conceptual, and challenging exercises, along with meaningful applications. This revision features more examples, more mid-level exercises, more figures, as well as improved conceptual flow, and the best in technology for learning and teaching.

### **Table of Contents**

- 1. Functions
- 2. Limits and Continuity
- 3. Differentiation
- 4. Applications of Derivatives
- 5. Integration
- 6. Applications of Definite Integrals
- 7. Integrals and Transcendental Functions
- 8. Techniques of Integration
- 9. Infinite Sequences and Series
- 10. Parametric Equations and Polar Coordinates
- 11. Vectors and the Geometry of Space
- 12. Vector-Valued Functions and Motion in Space
- 13. Partial Derivatives
- 14. Multiple Integrals
- 15. Integration in Vector Fields
- 16. First-Order Differential Equations (Online)
- 17. Second-Order Differential Equations (Online)

#### **Appendices**

- 1. Real Numbers and the Real Line
- 2. Mathematical Induction
- 3. Lines, Circles, and Parabolas
- 4. Conic Sections
- 5. Proofs of Limit Theorems
- 6. Commonly Occurring Limits
- 7. Theory of the Real Numbers
- 8. Complex Numbers
- 9. The Distributive Law for Vector Cross Products
- 10. The Mixed Derivative Theorem and the Increment Theorem
- 11. Taylor's Formula for Two Variables

### **Mathematics & Statistics**



# Calculus with Applications Edition 11

### Lial / Greenwell / Ritchey

#### Binding Paperback | Page Count 864

For freshman/sophomore, two-semester (2-3 quarter) courses covering applied calculus for students in business, economics, social sciences, or life sciences

Calculus with Applications, 11th Edition by Lial, Greenwell, and Ritchey, is our most applied text to date, making the math relevant and accessible for students of business, life science, and social sciences. Current applications, many using real data, are incorporated in numerous forms throughout the book, preparing students for success in their professional careers. With this edition, students will find new ways to help them learn the material, such as Warm-Up Exercises and added "help text" within examples.

### **Table of Contents**

- R. Algebra Reference
- R-1 Polynomials
- R-2 Factoring
- R-3 Rational Expressions
- R-4 Equations
- R-5 Inequalities
- R-6 Exponents
- R-7 Radicals
- 1. Linear Functions
- 2. Nonlinear Functions
- 3. The Derivative
- 4. Calculating the Derivative
- 5. Graphs and the Derivative
- 6. Applications of the Derivative
- 7. Integration
- 8. Further Techniques and Applications of Integration
- 9. Multivariable Calculus
- 10. Differential Equations
- 11. Probability and Calculus
- 12. Sequences and Series
- 13. The Trigonometric Functions

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Answers to Selected Exercises Photo Acknowledgements Index

ISBN 9781292108971 | PUB Date 4/1/2018



# College Algebra and Trigonometry Edition 6

### Lial / Hornsby / Schneider / Daniels

Binding Paperback | Page Count 1200

For courses in college algebra and trigonometry

The College Algebra series, by Lial, Hornsby, Schneider, and Daniels, combines the experience of master teachers to help students develop both the conceptual understanding and the analytical skills necessary for success in mathematics. With this latest edition, the authors respond to the challenges of new student expectations and new classroom models.

#### **Table of Contents**

- 1. Equations and Inequalities
- 2. Graphs and Functions
- 3. Polynomial and Rational Functions
- 4. Inverse, Exponential, and Logarithmic Functions
- 5. Trigonometric Functions
- 6. The Circular Functions and Their Graphs
- 7. Trigonometric Identities and Equations
- 8. Applications of Trigonometry
- 9. Systems and Matrices
- 10. Analytic Geometry
- 11. Further Topics in Algebra

**Appendices** 

ISBN 9781292151953 | PUB Date 4/2/2018



# Statistics for Managers Using Microsoft Excel Edition 8

### Levine / Stephan / Szabat

Binding Paperback | Page Count 728

For undergraduate business statistics courses

This text is the gold standard for learning how to use Microsoft Excel® in business statistics, helping students gain the understanding they need to be successful in their careers. The authors present statistics in the context of specific business fields; full chapters on business analytics further prepare students for success in their professions. Current data throughout the text lets students practice analyzing the types of data they will see in their professions. The friendly writing style include tips throughout to encourage learning.

### **Table of Contents**

- 1. Defining and Collecting Data
- 2. Organizing and Visualizing Variables
- 3. Numerical Descriptive Measures
- 4. Basic Probability
- 5. Discrete Probability Distributions
- 6. The Normal Distribution and Other Continuous Distributions
- 7. Sampling Distributions
- 8. Confidence Interval Estimation
- 9. Fundamentals of Hypothesis Testing: One-Sample Tests
- 10. Two-Sample Tests
- 11. Analysis of Variance
- 12. Chi-Square and Nonparametric Tests
- 13. Simple Linear Regression
- 14. Introduction to Multiple Regression
- 15. Multiple Regression Model Building
- 16. Time-Series Forecasting
- $\bullet$  17. Getting Ready to Analyze Data in the Future
- 18. Statistical Applications in Quality Management (online)
- 19. Decision Making (online)
- Appendices
- A. Basic Math Concepts and Symbols
- B. Important Excel and Minitab Skills and Concepts
- C. Online Resources
- D. Configuring Microsoft Excel
- E. Tables
- F. Useful Excel Knowledge
- G. Software FAQs
- Self-Test Solutions and Answers to Selected Even-Numbered Problems



# Statistics: Informed Decisions Using Data Edition 5

### Sullivan

Binding Paperback | Page Count 976

For courses in introductory statistics

Statistics: Informed Decisions Using Data, Fifth Edition, gives students the tools to see a bigger picture and make informed choices. As a current introductory statistics instructor,

Mike Sullivan III presents a text that is filled with ideas and strategies that work in today's classroom. His practical emphasis resonates with students and helps them see that statistics is connected, not only to individual concepts, but also with the world at large.

### **Table of Contents**

Resources for Success

**Technology Resources** 

**Applications Index** 

PART 1: GETTING THE INFORMATION YOU NEED

1. Data Collection

PART 2: DESCRIPTIVE STATISTICS

- 2. Organizing and Summarizing Data
- 3. Numerically Summarizing Data

4. Describing the Relation between Two Variables
PART 3: PROBABILITY AND PROBABILITY DISTRIBUTIONS

- 5. Probability
- 6. Discrete Probability Distributions
- 7. The Normal Probability Distribution

PART 4: INFERENCE: FROM SAMPLES TO POPULATION

- 8. Sampling Distributions
- 9. Estimating the Value of a Parameter
- 10. Hypothesis Tests Regarding a Parameter
- 11. Inferences on Two Samples
- 12. Inference on Categorical Data
- 13. Comparing Three or More Means
- Inference on the Least-Squares Regression Model and Multiple Regression
- 15. Nonparametric Statistics

Answers

ISBN 9781292157115 | PUB Date 4/1/2018

ISBN 9781292156347 | PUB Date 9/10/2017



## Essential Statistics Edition 2

Gould / Ryan / Wong

Binding Paperback | Page Count 584

ISBN 9781292161228 | PUB Date 4/2/2018

For a one-semester course in statistic

Essential Statistics aims to teach students how to access and analyze data critically in today's data-driven world. Regardless of the students' math backgrounds, this text helps to learn how to think about data and how to reason using data. With a clear, unintimidating writing style and carefully chosen pedagogy, this text makes data analysis accessible to all students.

### **Table of Contents**

Preface

**Index of Applications** 

1. Introduction to Data

Case Study-Deadly Cell Phones?

- 1.1 What Are Data?
- 1.2 Classifying and Storing Data
- 1.3 Organizing Categorical Data
- 1.4 Collecting Data to Understand Causality

Exploring Statistics-Collecting a Table of Different Kinds of Data

2. Picturing Variation with Graphs

Case Study-Student-to-Teacher Ratio at Colleges

- 2.1 Visualizing Variation in Numerical Data
- 2.2 Summarizing Important Features of a Numerical Distribution
- 2.3 Visualizing Variation in Categorical Variables
- 2.4 Summarizing Categorical Distributions
- 2.5 Interpreting Graphs

Exploring Statistics-Personal Distance

3. Numerical Summaries of Center and Variation

Case Study-Living in a Risky World

- 3.1 Summaries for Symmetric Distributions
- 3.2 What's Unusual? The Empirical Rule and z-Scores
- 3.3 Summaries for Skewed Distributions
- 3.4 Comparing Measures of Center
- 3.5 Using Boxplots for Displaying Summaries

Exploring Statistics-Does Reaction Distance Depend on Gender?

4. Regression Analysis: Exploring Associations between Variables

Case Study-Catching Meter Thieves

- 4.1 Visualizing Variability with a Scatterplot
- ${\it 4.2 Measuring Strength\ of\ Association\ with\ Correlation}$
- 4.3 Modeling Linear Trends
- 4.4 Evaluating the Linear Model

Exploring Statistics-Guessing the Age of Famous People

5. Modeling Variation with Probability

Case Study-SIDS or Murder?

- 5.1 What Is Randomness?
- 5.2 Finding Theoretical Probabilities
- 5.3 Associations in Categorical Variables
- 5.4 Finding Empirical Probabilities

Exploring Statistics-Let's Make a Deal: Stay or Switch?

6. Modeling Random Events: The Normal and Binomial Models

Case Study-You Sometimes Get More Than You Pay For

- 6.1 Probability Distributions Are Models of Random Experiments
- 6.2 The Normal Model
- 6.3 The Binomial Model (optional)

Exploring Statistics-ESP with Coin Flipping

7. Survey Sampling and Inference

Case Study-Spring Break Fever: Just What the Doctors Ordered?

- 7.1 Learning about the World through Surveys
- 7.2 Measuring the Quality of a Survey
- 7.3 The Central Limit Theorem for Sample Proportions
- 7.4 Estimating the Population Proportion with Confidence Intervals
- 7.5 Comparing Two Population Proportions with Confidence

Exploring Statistics-Simple Random Sampling Prevents Bias

8. Hypothesis Testing for Population Proportions

Case Study-Dodging the Question

- 8.1 The Essential Ingredients of Hypothesis Testing
- 8.2 Hypothesis Testing in Four Steps
- 8.3 Hypothesis Tests in Detail
- 8.4 Comparing Proportions from Two Populations

Exploring Statistics-Identifying Flavors of Gum through Smell

9. Inferring Population Means

Case Study-Epilepsy Drugs and Children

- 9.1 Sample Means of Random Samples
- 9.2 The Central Limit Theorem for Sample Means
- 9.3 Answering Questions about the Mean of a Population
- 9.4 Hypothesis Testing for Means
- 9.5 Comparing Two Population Means
- 9.6 Overview of Analyzing Means

Exploring Statistics-Pulse Rates

10. Analyzing Categorical Variables and Interpreting Research

Case Study-Popping Better Popcorn

10.1 The Basic Ingredients for Testing with Categorical Variables

10.2 Chi-Square Tests for Associations between Categorical Variables

10.3 Reading Research Papers

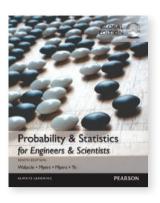
Appendix A Tables

Appendix B Check Your Tech Answers

Appendix C Answers to Odd-Numbered Exercises

Appendix D Credits

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# Probability & Statistics for Engineers & Scientists, MyStatLab Update Edition 9

Walpole / Myers / Myers / Ye

Binding Paperback | Page Count 816

For junior/senior undergraduates taking probability and statistics as applied to engineering, science, or computer science

This classic text provides a rigorous introduction to basic probability theory and statistical inference, with a unique balance between theory and methodology. Interesting, relevant applications use real data from actual studies, showing how the concepts and methods can be used to solve problems in the field. This revision focuses on improved clarity and deeper understanding.

### **Table of Contents**

### Preface

- 1. Introduction to Statistics and Data Analysis
- 2. Probability
- 3. Random Variables and Probability Distributions
- 4. Mathematical Expectation
- 5. Some Discrete Probability Distributions
- 6. Some Continuous Probability Distributions
- 7. Functions of Random Variables (Optional)
- 8. Sampling Distributions and More Graphical Tools
- 9. One- and Two-Sample Estimation Problems
- 10. One- and Two-Sample Tests of Hypotheses
- 11. Simple Linear Regression and Correlation
- 12. Multiple Linear Regression and Certain Nonlinear Regression Models
- 13. One-Factor Experiments: General
- 14. Factorial Experiments (Two or More Factors)
- 15. 2k Factorial Experiments and Fractions
- 16. Nonparametric Statistics
- 17. Statistical Quality Control
- 18 Bayesian Statistics

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- A. Statistical Tables and Proofs
- B. Answers to Odd-Numbered Non-Review Exercises Index

ISBN 9781292161365 | PUB Date 4/1/2018



# Thomas' Calculus Early Transcendentals SI Edition 13

Thomas / Weir / Hass

Binding Paperback | Page Count 1200

This text is designed for a three-semester or four-quarter calculus course (math, engineering, and science majors).

Calculus Early Transcendentals, 13th Edition, introduces students to the intrinsic beauty of calculus and the power of its applications. For more than half a century, this text has been revered for its clear and precise explanations, thoughtfully chosen examples, superior figures, and time- tested exercise sets. With this new edition, the exercises were refined, updated, and expanded.

### **Table of Contents**

- 1 Functions
- 2 Limits and Continuity
- 3 Derivatives
- 4 Applications of Derivatives
- 5 Integrals
- 6 Applications of Definite Integrals
- 7 Integrals and Transcendental Functions
- 8 Techniques of Integration
- 9 First-Order Differential Equations
- 10 Infinite Sequences and Series
- 11 Parametric Equations and Polar Coordinates
- 12 Vectors and the Geometry of Space
- 13 Vector-Valued Functions and Motion in Space
- 14 Partial Derivatives
- 15 Multiple Integrals
- 16 Integrals and Vector Fields
- 17 Second-Order Differential Equations online

Appendices

- A.1 Real Numbers and the Real Line
- A.2 Mathematical Induction
- A.3 Lines, Circles, and Parabolas
- A.4 Proofs of Limit Theorems
- A.5 Commonly Occurring Limits
  A.6 Theory of the Real Numbers
- A.7 Complex Numbers
- A.8 The Distributive Law for Vector Cross Products
- A.9 The Mixed Derivative Theorem and the Increment Theorem

ISBN 9781292163444 | PUB Date 4/1/2018



# Statistics: The Art and Science of Learning from Data Edition 4

### Agresti / Franklin / Klingenberg

Binding Paperback | Page Count 816

For courses in introductory statistics

Statistics: The Art and Science of Learning from Data, 4th Edition, takes a conceptual approach, helping students understand what statistics is about and learning theright questions to ask when analyzing data. This book takes the ideas that have turned statistics into a central science in modern life and makes them accessible, without compromising rigor. This book provides a wide variety of real-world data in the examples and exercises.

The text pays greater attention to the analysis of proportions than many other introductory statistics texts. Concepts are introduced first with categorical data, and then with quantitative data.

### **Table of Contents**

PART ONE: GATHERING AND EXPLORING DATA

- 1. Statistics: The Art and Science of Learning from Data
- 2. Exploring Data with Graphs and Numerical Summaries
- 3. Association: Contingency, Correlation, and Regression
- 4. Gathering Data

PART TWO: PROBABILITY, PROBABILITY DISTRIBUTIONS, AND SAMPLING DISTRIBUTIONS

- 5. Probability in Our Daily Lives
- 6. Probability Distributions
- 7. Sampling Distributions

PART THREE: INFERENTIAL STATISTICS

- 8. Statistical Inference: Confidence Intervals
- 9. Statistical Inference: Significance Tests About Hypotheses
- 10. Comparing Two Groups

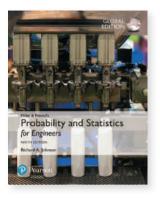
PART FOUR: ANALYZING ASSOCIATION AND EXTENDED STATISTICAL METHODS

- 11. Analyzing the Association Between Categorical Variables
- 12. Analyzing the Association Between Quantitative Variables: Regression Analysis
- 13. Multiple Regression
- 14. Comparing Groups: Analysis of Variance Methods
- 15. Nonparametric Statistics

Tables

Answers

 $\textbf{ISBN}\ 9781292164779\ |\ \textbf{PUB\ Date}\ 4/1/2018$ 



# Miller & Freund's Probability and Statistics for Engineers Edition 9

### Johnson / Miller / Freund

Binding Paperback | Page Count 552

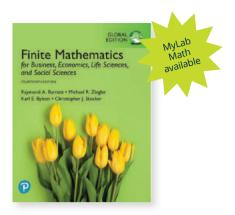
For an introductory, one or two semester, or sophomorejunior level course in Probability and Statistics or Applied Statistics for engineering, physical science, and mathematics students

Miller & Freund's Probability and Statistics for Engineers is rich in exercises and examples, and explores both elementary probability and basic statistics, with an emphasis on engineering and science applications. Much of the data has been collected from the author's own consulting experience and from discussions with scientists and engineers about the use of statistics in their fields. In later chapters, the text emphasizes designed experiments, especially two-level factorial design. The 9th Edition includes several new datasets and examples showing application of statistics in scientific investigations, familiarizing students with the latest methods, and readying them to become real-world engineers and scientists.

### **Table of Contents**

- 1. Introduction
- 2. Organization and Description of Data
- 3. Probability
- 4. Probability Distributions
- 5. Probability Densities
- 6. Sampling Distributions
- 7. Inferences Concerning a Mean
- 8. Comparing Two Treatments
- 9. Inferences Concerning Variances
- 10. Inferences Concerning Proportions
- 11. Regression Analysis
- 12. Analysis of Variance
- 13. Factorial Experimentation
- 14. Nonparametric Tests
- 15. The Statistical Content of Quality Improvement Programs
- 16. Application to Reliability and Life Testing

**ISBN** 9781292176017 | **PUB Date** 4/1/2018



### Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences Edition 14

### Barnett / Ziegler / Byleen / Stocker

Binding Paperback | Page Count 672

For one-semester courses in Finite Mathematics.

Helps students "get the idea." Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th Edition offers more built-in guidance than any other text for this course – with special emphasis on applications and prerequisite skills – and a host of student-friendly features to help students catch up or learn on their own. The text's emphasis on helping students "get the idea" is enhanced in the new edition by a design refresh, updated data and applications, and a robust MyLab™ Math course.

#### **Table of Contents**

- I. A LIBRARY OF ELEMENTARY FUNCTIONS
- 1. Linear Equations and Graphs
- 2. Functions and Graphs
- II. FINITE MATHEMATICS
- 3. Mathematics of Finance
- 4. Systems of Linear Equations; Matrices
- 5. Linear Inequalities and Linear Programming
- 6. Linear Programming: The Simplex Method
- 7. Logic, Sets, and Counting
- 8. Probability
- 9. Markov Chains
- 10. Data Description and Probability Distributions
- 11. Games and Decisions (online at goo.gl/6VBjkQ)

Appendix A: Basic Algebra Review

Appendix B: Special Topics

Appendix C: Area under the Standard Normal Curve

ISBN 9781292264202 | PUB Date 11/15/2018



# Introduction to Mathematical Statistics Edition 8

Binding Paperback | Page Count 768

For courses in mathematical statistics.

Comprehensive coverage of mathematical statistics – with a proven approach. Introduction to Mathematical Statistics by Hogg, McKean, and Craig enhances student comprehension and retention with numerous, illustrative examples and exercises.

#### **Table of Contents**

- 1. Probability and Distributions
- 2. Multivariate Distributions
- 3. Some Special Distributions
- 4. Some Elementary Statistical Inferences
- 5. Consistency and Limiting Distributions
- 6. Maximum Likelihood Methods
- 7. Sufficiency
- 8. Optimal Tests of Hypotheses
- 9. Inferences About Normal Linear Models
- 10. Nonparametric and Robust Statistics
- 11. Bayesian Statistics

Appendices:

- A. Mathematical Comments
- B. R Primer
- C. Lists of Common Distributions
- D. Table of Distributions
- E. References
- F. Answers to Selected Exercises

ISBN 9781292264769 | PUB Date 1/20/2018



# A First Course in Probability Edition 10

#### Ross

#### Binding Paperback | Page Count 528

For upper-level to graduate courses in Probability or Probability and Statistics, for majors in mathematics, statistics, engineering, and the sciences.

Explores both the mathematics and the many potential applications of probability theory. A First Course in Probability offers an elementary introduction to the theory of probability for students in mathematics, statistics, engineering, and the sciences. Through clear and intuitive explanations, it attempts to present not only the mathematics of probability theory, but also the many diverse possible applications of this subject through numerous examples. The 10th Edition includes many new and updated problems, exercises, and text material chosen both for inherent interest and for use in building student intuition about probability.

### **Table of Contents**

- 1. COMBINATORIAL ANALYSIS
- 2. AXIOMS OF PROBABILITY
- 3. CONDITIONAL PROBABILITY AND INDEPENDENCE
- 4. RANDOM VARIABLES
- 5. CONTINUOUS RANDOM VARIABLES
- 6. JOINTLY DISTRIBUTED RANDOM VARIABLES
- 7. PROPERTIES OF EXPECTATION
- 8. LIMIT THEOREMS 394
- 9. ADDITIONAL TOPICS IN PROBABILITY
- 10. SIMULATION

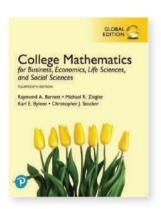
Answers to Selected Problems

Solutions to Self-Test Problems and Exercises Index

Common Discrete Distributions

Common Continuous Distributions

ISBN 9781292269207 | PUB Date 8/9/2018



### College Mathematics for Business, Economics, Life Sciences, and Social Sciences Edition 14

### Barnett / Ziegler / Byleen / Stocker

### Binding Paperback | Page Count 1008

For two-semester courses in Finite Math & Applied Calculus or Mathematics for Business

College Mathematics for Business, Economics, Life Sciences, and Social Sciences, 14th Edition offers more built-in guidance than any other text for this course – with special emphasis on applications and prerequisite skills – and a host of student-friendly features to help students catch up or learn on their own. Its emphasis on helping students "get the idea" is enhanced in the new edition by a design refresh, updated data and applications, and a robust  $MyLab^{TM}$  Math course.

The text is organized into three parts: A Library of Elementary Functions (Chapters 1-2), Finite Mathematics (Chapters 3-8, 15), and Calculus (Chapters 9-14).

### Table of Contents

- I. A LIBRARY OF ELEMENTARY FUNCTIONS
- 1. Linear Equations and Graphs
- 2. Functions and Graphs
- II. FINITE MATHEMATICS
- 3. Mathematics of Finance
- 4. Systems of Linear Equations; Matrices
- 5. Linear Inequalities and Linear Programming
- 6. Linear Programming: The Simplex Method
- 7. Logic, Sets, and Counting
- 8. Probability
- III. CALCULUS
- 9. Limits and the Derivative
- 10. Additional Derivative Topics
- 11. Graphing and Optimization
- 12. Integration
- 13. Additional Integration Topics
- 14. Multivariable Calculus
- 15. Markov Chains (online at goo.gl/8SZkyn)

Appendix A: Basic Algebra Review

Appendix B: Special Topics

Appendix C: Tables

Table I Integration Formulas

Table II Area under the Standard Normal Curve

ISBN 9781292270494 | PUB Date 5/8/2018