

MATHEMATICS & STATISTICS

New releases and bestsellers



MATHEMATICS & STATISTICS

New releases and bestsellers

TABLE OF CONTENTS

WebAssign question types.....	3
Precalculus.....	4
Calculus.....	5
Advanced maths.....	6
WebAssign for maths.....	7
Intro statistics.....	8
Advanced statistics.....	9
WebAssign for statistics.....	10
SALT: Statistical Analysis and Learning Tool.....	11

WebAssign

The most powerful online homework and assessment solution

WebAssign is a flexible and fully customisable online instructional system for STEM disciplines that puts powerful tools in the hands of instructors. Designed to help you to quickly and easily create assignments, save time with auto-grading and monitor your students' progress, *WebAssign* can be integrated with your Learning Management System, allowing easy access for you and your students.

Engage students with immediate feedback, highly visual content and interactive questions, to develop a deeper conceptual understanding.

PARTNERSHIP

We partner with you to ensure your success with digital – we're with you every step of the way

- Full onboarding support
- Our partnership doesn't stop when the course starts
- Your students get our service and support too

Find out more about the Cengage Digital Partnership Team

au.cengage.com/digital-support



WebAssign question types

The right content at the right time

Deliver learning in a way that helps students build confidence, understand concepts and leads them to concept mastery. The result? Increased student success.

WebAssign learning content has been carefully researched, authored and coded by in-house subject matter experts with years of teaching experience to significantly impact student learning outcomes. With content that supports the needs of specific courses, measurements to enhance prerequisite skills and applications that make coursework engaging and relevant, WebAssign is designed to help you improve the quality of students' learning experiences.

Master It Tutorials (.MIT)

Strengthen student problem-solving skills with these multi-step tutorials that provide concise direction and easy-to-follow calculations, so students understand the concepts and reasoning behind the problem solving.

Video Examples (.VE)

Video Example problems require students to first watch a video conceptualising the problem and then answer questions that measure their concept acquisition.

Watch Its (.WI)

Narrated and closed-captioned Watch It videos walk students through the proper steps to solve a similar problem to facilitate the learning process while studying and completing homework.

Quick Prep (.QP) Modules*

Address readiness gaps with questions that are designed to review prerequisite knowledge before the course begins. Assign any of these Quick Prep modules early in the course or whenever the review is most needed.

Just in Time (.JIT) Exercises*

Exercises that let students check their mastery of prerequisite skills while they work through their assigned coursework, ensuring students at all levels can continue course progress.

Expanded Problems (.EP)

Better understand your students' problem-solving process with these expanded versions of existing textbook questions. Students are required to include the intermediary steps they used to derive their final answer.

The screenshot shows a browser window titled "Master It" with the URL "demo.webassign.net/v4cgi/questions/tutorial_popup.tpl". The page content is as follows:

Master It

Write an equation in general form of the circle with the given properties.
Ends of diameter at (4, 6) and (-4, -6)

Part 1 of 6

To determine the equation of a circle in general form, we need to find the center of the circle and its radius.

We are given the endpoints of the diameter of the circle. To determine the center of the circle we find

the midpoint of the diameter .

Part 2 of 6

The center of the circle is at the midpoint of the diameter.

$$(h, k) = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Thus, the center has coordinates

$$h = \frac{4 + (-4)}{2} = \text{0}$$

and

$$k = \frac{6 + (-6)}{2} = \text{0}$$

Part 3 of 6

The radius r of the circle is the distance between the center and one endpoint of the diameter.

Part 4 of 6

Use the distance formula to find the radius between the center, (0, 0), and the point (4, 6).

$$r = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$
$$= \sqrt{(4 - 0)^2 + (6 - 0)^2}$$
$$= \sqrt{52} = 2\sqrt{13}$$

Part 5 of 6

Thus, the equation $(x - h)^2 + (y - k)^2 = r^2$, in standard form, is as follows.

$$(x - 0)^2 + (y - 0)^2 = (\sqrt{52})^2$$
$$x^2 + y^2 = 52$$

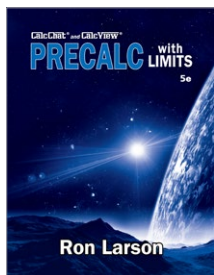
Part 6 of 6

The general form of this equation, $x^2 + y^2 + cx + dy + e = 0$, is as follows.

The interface includes a "mathPad" toolbar on the right with buttons for operations, functions, symbols, relations, sets, trig, Greek, and a task icon.

*Availability of these question types varies by product

Precalculus



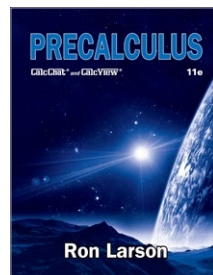
PRECALCULUS WITH LIMITS, 5E

Larson
ISBN: 9780357457856
1120 pp | Hardback | eBook © 2022

AVAILABLE WITH WEBASSIGN

NEW EDITION

This special edition offers brief ongoing reviews of core algebra topics and coverage of analytic geometry in three dimensions in addition to introducing concepts covered in calculus.



PRECALCULUS, 11E

Larson
ISBN: 9780357456996
992 pp | Hardback | eBook © 2022

AVAILABLE WITH WEBASSIGN

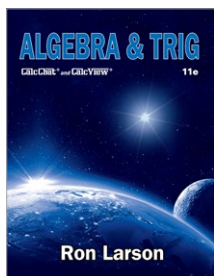
NEW EDITION

Engage your students and prepare them for success in your course and beyond with the student-focused approach of Ron Larson and *WebAssign*. Updated and refined through learning design principles, the 11th edition removes barriers to learning and offers a carefully planned and inclusive experience for all students. Larson presents concepts clearly and offers a wealth of learning support, including free text-specific tutorial support at *CalcView.com* and *CalcChat.com*. Students facing readiness gaps will overcome them with new 'Review & Refresh' exercises and *WebAssign* support (a corequisite version is also available). Taking their understanding to the next level, students apply mathematical concepts with new 'Exploring the Concepts' sections, 'How Do You See It?' exercises, and 'Explore It' interactive learning modules.

TABLE OF CONTENTS

Includes chapter coverage of:

11. Analytical geometry in three dimensions
12. Limits and an introduction to calculus
13. Concepts in statistics

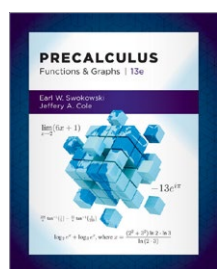


ALGEBRA & TRIG, 11E

Larson
ISBN: 9780357452080
992 pp | Hardback | eBook © 2022

AVAILABLE WITH WEBASSIGN

NEW EDITION



PRECALCULUS: FUNCTIONS & GRAPHS, 13E

Swokowski | Cole
ISBN: 9781337552332
976 pp | Hardback | eBook © 2019

AVAILABLE WITH WEBASSIGN

Precalculus: Functions and Graphs, 13th Edition, retains the features that have made it so popular: clear exposition, uncluttered layout and diverse, applications-rich examples and exercises. The excellent, time-tested problems have been widely praised for their consistency and appropriate level of difficulty for precalculus students. Mathematically sound, *Precalculus: Functions and Graphs* effectively prepares students for further courses in mathematics.

TABLE OF CONTENTS

1. Functions and their graphs
2. Polynomial and rational functions
3. Exponential and logarithmic functions
4. Trigonometry
5. Analytic trigonometry
6. Additional topics in trigonometry
7. Systems of equations and inequalities
8. Matrices and determinants
9. Sequences, series, and probability
10. Topics in analytic geometry

Appendix A

Review of fundamental concepts of algebra

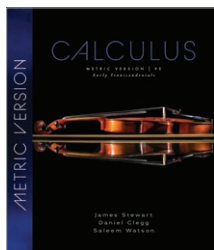
- A.1. Real numbers and their properties
- A.2. Exponents and radicals
- A.3. Polynomials and factoring
- A.4. Rational expressions
- A.5. Solving equations
- A.6. Linear inequalities in one variable
- A.7. Errors and the algebra of calculus

Appendix B

Concepts in statistics (web)

- B.1. Representing data
- B.2. Analyzing data
- B.3. Modeling data

Calculus



CALCULUS: EARLY TRANSCENDENTALS, 9TH METRIC EDITION

Stewart | Clegg | Watson

ISBN: 9780357113516

1408 pp | Hardback | eBook © 2021

AVAILABLE WITH WEBASSIGN

NEW EDITION

James Stewart's *Calculus*, metric series is the top-seller in the world because of its problem-solving focus, mathematical precision and accuracy, and outstanding examples and problem sets. Selected and mentored by Stewart, Daniel Clegg and Saleem Watson continue his legacy of providing students with the strongest foundation for a STEM future. Their careful refinements retain Stewart's clarity of exposition and make the 9th edition even more usable as a teaching tool for instructors and as a learning tool for students. Stewart was an outstanding teacher and digital innovator, and *WebAssign* continues to set the standard for the course with new resources like 'Explore It' interactive learning modules. Showing that Calculus is both practical and beautiful, the Stewart approach and *WebAssign* resources enhance understanding and build confidence for millions of students worldwide.

TABLE OF CONTENTS

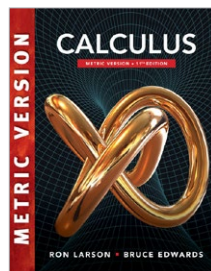
Diagnostic tests

A preview of calculus

1. Functions and models
2. Limits and derivatives
3. Differentiation rules
4. Applications of differentiation
5. Integrals
6. Applications of integration
7. Techniques of integration
8. Further applications of integration
9. Differential equations
10. Parametric equations and polar coordinates
11. Sequences, series, and power series
12. Vectors and the geometry of space
13. Vector functions
14. Partial derivatives
15. Multiple integrals
16. Vector calculus
17. Second-order differential equations (online)

Appendixes

- A: Numbers, inequalities, and absolute values
- B: Coordinate geometry and lines
- C: Graphs of second-degree equations
- D: Trigonometry
- E: Sigma notation
- F: Proofs of theorems
- G: The logarithm defined as an integral
- H: Answers to odd-numbered exercises



CALCULUS, 11TH INTERNATIONAL METRIC EDITION

Larson

ISBN: 9781337616195

1280 pp | Paperback | eBook © 2018

AVAILABLE WITH WEBASSIGN

With a long history of innovation in the market, Larson/Edwards' *Calculus, International Metric Edition* has been widely praised by a generation of students and professors for solid and effective pedagogy that addresses the needs of a broad range of teaching and learning styles and environments. Each title in the series is one component in a comprehensive calculus course program that carefully integrates and coordinates print, media, and technology products for successful teaching and learning.

TABLE OF CONTENTS

Preparation for calculus

1. Limits and their properties
2. Differentiation
3. Applications of differentiation
4. Integration
5. Logarithmic, exponential, and other transcendental functions
6. Differential equations
7. Applications of integration
8. Integration techniques and improper integrals
9. Infinite series
10. Conics, parametric equations, and polar coordinates
11. Vectors and the geometry of space
12. Vector-valued functions
13. Functions of several variables
14. Multiple integration
15. Vector analysis
16. Second order differential equations* online

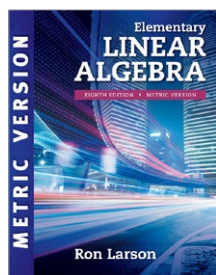
Appendix

- A. Proofs of selected theorems
- B. Integration tables
- C. Precalculus review (web)
 - C.1. Real numbers and the real number line
 - C.2. The cartesian plane
- D. Rotation and the general second-degree equation (web)
- E. Complex numbers (web)
- F. Business and economic applications (web)
- G. Fitting models to data (web)

AVAILABLE AS TWO VOLUMES:

1. Single Variable Calculus: Early Transcendentals, 9th Metric Edition
ISBN: 9780357113523
2. Multivariable Calculus, 9th International Metric Edition
ISBN: 9780357113509

Advanced maths



ELEMENTARY LINEAR ALGEBRA, 8TH INTERNATIONAL METRIC EDITION

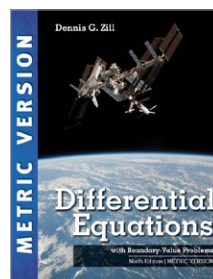
Larson

ISBN: 9781337556217

592 pp | Paperback | eBook © 2017

AVAILABLE WITH WEBASSIGN

The clear, careful, and concise presentation of material in *Elementary Linear Algebra, 8th International Metric Edition* helps students to fully understand how mathematics works. The author balances theory with examples, applications, and geometric intuition for a complete, step-by-step learning system. To engage students in the material, a new design highlights the relevance of the mathematics and makes the book easier to read. Data and applications reflect current statistics and examples, demonstrating the link between theory and practice. The companion website LarsonLinearAlgebra.com offers free access to multiple study tools and resources. CalcChat.com offers free step-by-step solutions to the odd-numbered exercises in the text.



DIFFERENTIAL EQUATIONS WITH BOUNDARY-VALUE PROBLEMS, 9TH INTERNATIONAL METRIC EDITION

Zill I Wright

ISBN: 9781337559881

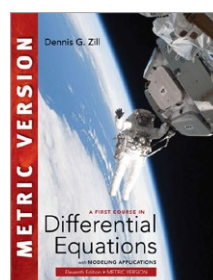
664 pp | Paperback | eBook © 2018

AVAILABLE WITH WEBASSIGN

Differential Equations with Boundary-value Problems, 9e, International Metric Edition strikes a balance between the analytical, qualitative, and quantitative approaches to the study of differential equations. This proven text speaks to students of varied majors through a wealth of pedagogical aids, including an abundance of examples, explanations, 'Remarks' boxes, and definitions. Written in a straightforward, readable, and helpful style, the book provides a thorough overview of the topics typically taught in a first course in differential equations as well as an introduction to boundary-value problems and partial differential equations.

TABLE OF CONTENTS

1. Systems of linear equations
2. Matrices
3. Determinants
4. Vector spaces
5. Inner product spaces
6. Linear transformations
7. Eigenvalues and eigenvectors
8. Complex vector spaces (online)
9. Linear programming (online)
10. Numerical methods (online)



A FIRST COURSE IN DIFFERENTIAL EQUATIONS WITH MODELING APPLICATIONS, 11TH INTERNATIONAL METRIC EDITION

Zill

ISBN: 9781337556644

480 pp | Paperback | eBook © 2018

AVAILABLE WITH WEBASSIGN

TITLES AVAILABLE IN OTHER AREAS INCLUDE:

Developmental mathematics

Finite mathematics

Applied mathematics

Liberal arts mathematics

Discrete mathematics

Mathematical modelling

Linear algebra

Abstract algebra

Differential equations

Discipline-specific question types for mathematics

Personal Study Plan

The Personal Study Plan® (available for select titles) helps your students identify which sections of the textbook they have mastered and which sections require more study, and provides each student with a customised selection of instructional resources that address the student's deficiencies.

You may want to use a Personal Study Plan for:

- Remediation
- Test preparation
- Supplementary instruction
- Homework

Assignments	Personal Study Plan	Resources	Average Score	Students
Tussy & Gustafson :: Prealgebra - 3e				
Settings				
2: The Integers			85%	4/5
2.2: Adding Integers			100%	
2.3: Subtracting Integers			100%	
2.4: Multiplying Integers			75%	
2.5: Dividing Integers			58%	
2.6: Order of Operations and Estimation			100%	
4: Fractions and Mixed Numbers			Not Attempted	-/5
5: Decimals			Not Attempted	-/5
6: Graphing, Exponents, and Polynomials			Not Attempted	-/5
7: Percent			Not Attempted	-/5
8: Ratio, Proportion, and Measurement			Not Attempted	-/5
9: Introduction to Geometry			Not Attempted	-/5

The Personal Study Plan® tab on your My Classes page displays an overview of your students' performance on the Personal Study Plan.

Explore It (.EI) question types for precalculus and calculus

WebAssign includes many different question types, some that have been developed specific to a discipline.

In available precalculus and calculus titles, 'Explore It' interactive modules engage students and develop conceptual understanding. Using their computers or smartphones, students learn the concept, watch a video, explore and test the concept, and discover when they would use it. Automatically graded exercises with the patented grading engine in WebAssign accompany each module.

CONCEPT EXAMPLE VIDEO EXPLORE & TEST WHEN WOULD I USE THIS

YOU WILL LEARN ABOUT:
How rise over run can be used to estimate the rate of change and the derivative when the original function is not known.

In real world applications, measurements of certain quantities such as position, temperature, number of individuals, and concentrations are taken at specific points in time. The rate of change of these quantities can be estimated using the rise over run formula for slope. This may also be used to estimate the derivative of a function f that is not known.

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{f(x_2) - f(x_1)}{x_2 - x_1}$$

$$\text{derivative} = f'(x) = \lim_{\Delta x \rightarrow 0} \frac{f(x + \Delta x) - f(x)}{\Delta x}$$

CONCEPT EXAMPLE VIDEO EXPLORE & TEST WHEN WOULD I USE THIS

Notice that the slope of the secant line drawn between these two points gives a better approximation of the rate of change of the position than the previous estimate using points that were further apart.

CONCEPT EXAMPLE VIDEO EXPLORE & TEST WHEN WOULD I USE THIS

GRAPHICAL DEFINITION OF DERIVATIVES Function 1 Function 2 Function 3

A chemist has placed a solution at 50°C in an ice bath and recorded the temperature over time using a digital thermometer. The temperature recordings over time for the first 10 minutes are shown in the corresponding graph. The derivative of the function gives the instantaneous rate of cooling at any point in time within the first ten minutes.

1. What is the temperature after 1 minute? Choose the x-coordinate of the fixed point to be equal to 1. What is the corresponding y-value?

18.4°C
 30.3°C
 38.9°C
 50°C

Function 1 $T(t) = 50e^{-0.1t}$

Coordinates of Fixed Point = (1.00 , 50.00) Slope of secant line rise/run = -10.81
Coordinates of Adjustable Point = (4.00 , 6.77) Slope of tangent line $T'(0.0) = -05.00$

Submit

CONCEPT EXAMPLE VIDEO EXPLORE & TEST WHEN WOULD I USE THIS

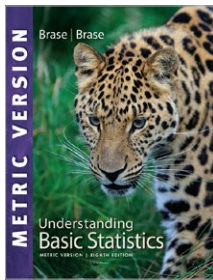
Professionals from various fields must estimate rates of change such as velocities and growth rates when the functions describing these quantities are not known. Rates of change may be approximated using estimates of the derivative. Here are some examples.

Veterinarians use video analysis to understand the movement of horses and other animals over surfaces. Video analysis can also be used to diagnose lameness and disease. While stills are placed on the horse to track the position of the knee and other points. The velocity of these parts can be calculated using the rise over run to estimate the derivative of the position function. Such estimates are needed when the function describing the position over time is not known.

Epidemiologists at the Center for Disease Control track the number of clinical cases of a disease over time. From this data, they can estimate the growth rate of a disease. This is done by calculating the rise over run of the number of cases as a function of time. The rise over run gives an estimate of the derivative, and the derivative describes the growth rate of the disease. This growth rate may be used to make policy decisions, such as whether or not to restrict travel.

Civil engineers often track the flow rate of water through a drainage system. The rate of change of the volume of water is used to determine the flow rate. The flow rate is found by taking the derivative of the function describing the volume over time. The derivative can be estimated using the rise over the run. Such estimates are needed since the function describing the volume may not be known. Monitoring the flow rate is important for proper drainage during floods.

Intro statistics

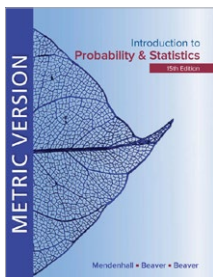


UNDERSTANDING BASIC STATISTICS, 8TH INTERNATIONAL METRIC EDITION

Brase | Brase
ISBN: 9781337782180
672 pp | Paperback | eBook © 2019

AVAILABLE WITH WEBASSIGN

Brase/Brase's *Understanding Basic Statistics, 8th International Metric Edition* provides instructors with a streamlined and effective way to teach the essentials of statistics, including early coverage of regression, within a more limited timeframe. With simulation questions, labs, projects, news-sourced videos with questions, and more available in the online course, this solution includes an entire course package designed to teach students the basics of statistics and how to apply those to real-world situations.

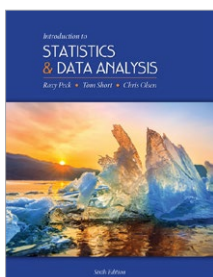


INTRODUCTION TO PROBABILITY AND STATISTICS, 15TH METRIC EDITION

Mendenhall | Beaver | Beaver
ISBN: 9780357114469
744 pp | Paperback | eBook © 2020

AVAILABLE WITH WEBASSIGN

Used by hundreds of thousands of students since its first edition, *Introduction to Probability and Statistics, 15th Metric Edition* continues to blend the best of its proven, error-free coverage with new innovations. Written for the traditional introductory statistics course, the book takes advantage of modern technology-including computational software and graphing calculators-to facilitate statistical reasoning as well as the interpretation of statistical results.

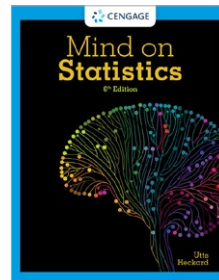


INTRODUCTION TO STATISTICS AND DATA ANALYSIS, 6E

Peck | Olsen | Short
ISBN: 9781337793612
896 pp | Hardback | eBook © 2020

AVAILABLE WITH WEBASSIGN

Peck, Short, and Olsen's *Introduction to Statistics and Data Analysis, 6th Edition* lowers the reading level from the previous edition and significantly increases homework scaffolding for difficulty level. In order to get students thinking statistically, this text stresses interpretation and communication of statistical information through hands-on, activity-based learning using real data.



MIND ON STATISTICS, 6E

Utts | Heckard
ISBN: 9781337793605
768 pp | Hardback | eBook © 2022

AVAILABLE WITH WEBASSIGN

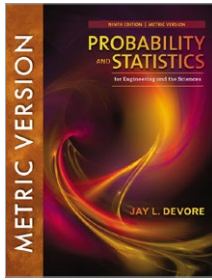
NEW EDITION

Engage your students' natural curiosity and motivate them to learn statistics with the intriguing questions, interesting examples and meaningful explanations in Utts/Heckard's *Mind on Statistics, 6th edition*. This edition focuses on interpreting results, encouraging students to develop statistical intuition. The authors place the conceptual development of statistical ideas into context, highlighting the importance of looking for – and finding – meaning in data that impacts daily life. Students develop statistical literacy while learning the statistical methodology taught in introductory courses. For example, hypothesis testing is now presented as a method for guiding decision-making rather than as a method for achieving statistical significance. The authors also explain common misunderstandings and provide tips for making sense of statistics in the news. In addition, *WebAssign* provides a Statistical Analysis and Learning Tool (SALT) to help students gain a deeper understanding of statistics.

TABLE OF CONTENTS

1. Statistics success stories and cautionary tales
2. Turning data into information
3. Relationships between quantitative variables
4. Relationships between categorical variables
5. Sampling: surveys and how to ask questions
6. Gathering useful data for examining relationships
7. Probability
8. Random variables
9. Understanding sampling distributions: statistics as random variables
10. Estimating proportions with confidence
11. Estimating means with confidence
12. Testing hypotheses about proportions
13. Testing hypotheses about means
14. Inference about simple regression
15. More about inference for categorical variables
16. Analysis of variance
17. Turning information into wisdom

Advanced statistics



PROBABILITY AND STATISTICS FOR ENGINEERING AND THE SCIENCES, 9TH INTERNATIONAL METRIC EDITION

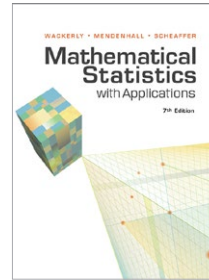
Devore
ISBN: 9781337094269
768 pp | Paperback | eBook © 2016

AVAILABLE WITH WEBASSIGN

Make statistics practical for engineering students in any specialty with *Probability and Statistics for Engineering and the Sciences, 9th International Metric Edition*. Always a market leader, this calculus-based text offers a comprehensive introduction to probability and statistics while demonstrating how professionals put concepts, models, and methodologies to work in today's scientific careers. Jay Devore, an award-winning professor and internationally recognised author and statistician, stresses lively examples and engineering activities to drive home the numbers without overly rigorous mathematical development and derivations. A variety of examples, practice problems, sample tests, and simulations based on real data and issues help students intuitively understand the material. Proven and accurate, *Probability and Statistics for Engineering and the Sciences, 9th International Metric Edition* also includes graphics and screen shots from SAS®, MINITAB®, and Java™ Applets to give students a solid perspective of statistics in action.

TABLE OF CONTENTS

1. Overview and descriptive statistics
2. Probability
3. Discrete random variables and probability distributions
4. Continuous random variables and probability distributions
5. Joint probability distributions and random samples
6. Point estimation
7. Statistical intervals based on a single sample
8. Tests of hypothesis based on a single sample
9. Inferences based on two samples
10. The analysis of variance
11. Multifactor analysis of variance
12. 4 2p factorial experiments
13. Simple linear regression and correlation
14. Nonlinear and multiple regression
15. Goodness-of-fit tests and categorical data analysis
16. Distribution-free procedures
17. Quality control methods



MATHEMATICAL STATISTICS WITH APPLICATIONS, 7E

Wackerly | Mendenhall | Scheaffer
ISBN: 9780495110811
944 pp | Hardback | eBook © 2008

AVAILABLE WITH WEBASSIGN

In their bestselling *Mathematical Statistics with Applications*, premiere authors Dennis Wackerly, William Mendenhall, and Richard L. Scheaffer present a solid foundation in statistical theory while conveying the relevance and importance of the theory in solving practical problems in the real world. The authors' use of practical applications and excellent exercises helps students discover the nature of statistics and understand its essential role in scientific research.

TABLE OF CONTENTS

1. What is statistics?
 2. Probability
 3. Discrete random variables and their probability distributions
 4. Continuous random variables and their probability distributions
 5. Multivariate probability distributions
 6. Functions of random variables
 7. Sampling distributions and the central limit theorem
 8. Estimation
 9. Properties of point estimators and methods of estimation
 10. Hypothesis testing
 11. Linear models and estimation by least squares
 12. Considerations in designing experiments
 13. The analysis of variance
 14. Analysis of categorical data
 15. Nonparametric statistics
 16. Introduction to Bayesian methods for inference
- Appendices

Discipline-specific question types for statistics

Stats in Practice (.SIP) exercises

Show students how statistics applies in the real world. Short and current news videos introduce each module. Each video is accompanied by multiple-choice and discussion questions, so that students can understand real-world context of what they're learning and stay engaged throughout the whole module.

Stats in Practice: The Binomial Probability Distribution

Monty Hall Game (Part 1)

Part 1 - Multiple Choice Questions

This video demonstrates the Monty Hall Problem, named after the host of the game show "Let's Make a Deal" that originally aired in the 1960s and 1970s. In this show, contestants picked one of three curtains, one of which had a car behind it and the other two had goats. After contestants chose a curtain, Monty Hall showed the contestant what was behind one of the two curtains the contestant had not chosen. Then he offered the contestant the option to switch her choice.

The men in the video set up an experiment to compare the two strategies for playing this game. Strategy A is to stick with the original choice. Strategy B is to switch the choice. How many times do the men perform each strategy? That is, how many "trials" do they perform for each strategy?

- 10
- 3
- 40
- 20

Define "success" as finding a car under the chosen cup. What is the probability of success for strategy A (don't switch) and strategy B (switch)?

- Strategy A: $P(\text{success}) = \frac{2}{3}$; Strategy B: $P(\text{success}) = \frac{1}{2}$
- Strategy A: $P(\text{success}) = \frac{1}{2}$; Strategy B: $P(\text{success}) = \frac{1}{3}$

Stats in Practice: Normal Curves and Sampling Distribution

Less Cash in Wallets

Part 1 - Multiple Choice Questions

The video suggests several ways to keep non-cash transactions secure. Which of the following did they not recommend?

- switching passwords to online accounts frequently
- using a credit card instead of a debit card
- varying passwords to online accounts
- using a PIN number with a debit card

The video states that 78% of people carry less than \$50 in cash, 40% carry less than \$20 in cash, and 9% carry no cash. This suggests that if you randomly choose a person and ask him how much cash he is carrying, the probability that he is carrying \$50 or more is which of the following?

- 1.00
- 0.22
- 0.09
- 0.78

The video states that 78% of people carry less than \$50 in cash, 40% carry less than \$20 in cash, and 9% carry no cash. Suppose you have a sample of 100 people and you check how much cash each person is carrying. Assume the amounts of cash carried by your sample is fairly representative of the percentages stated in the video. Which of the following plots best depicts the distribution of the amount of cash carried by people in your sample?

Stats Lab (.LAB) modules

Students can perform real statistical analysis in class or online with pre-made and module-specific Stats Labs. Require students to use the instructor-selected data analysis tool to analyse a real data set, pulling together knowledge learned from that module and previous material to facilitate whole-picture learning.

Designed for the data analysis tool of your choice (Excel, Graphic Calculator, R, SPSS, JMP, MiniTab)

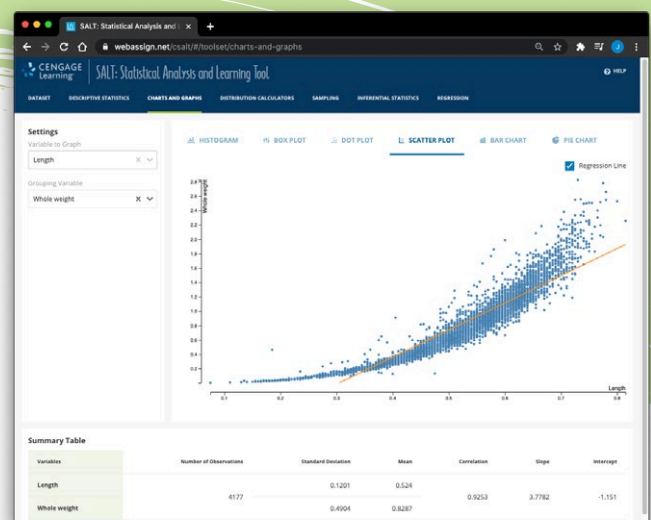
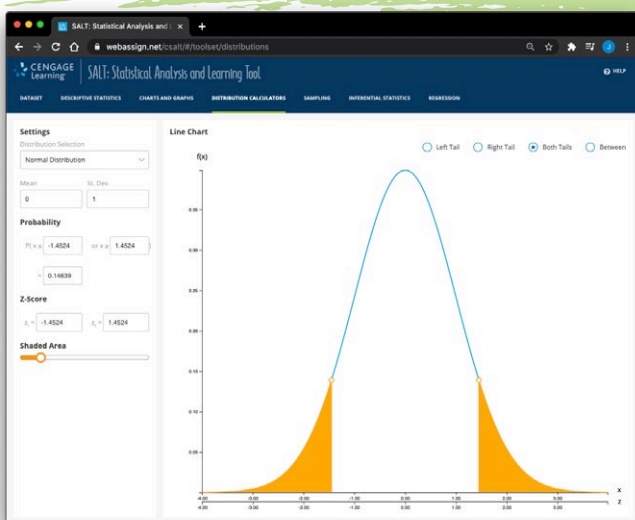
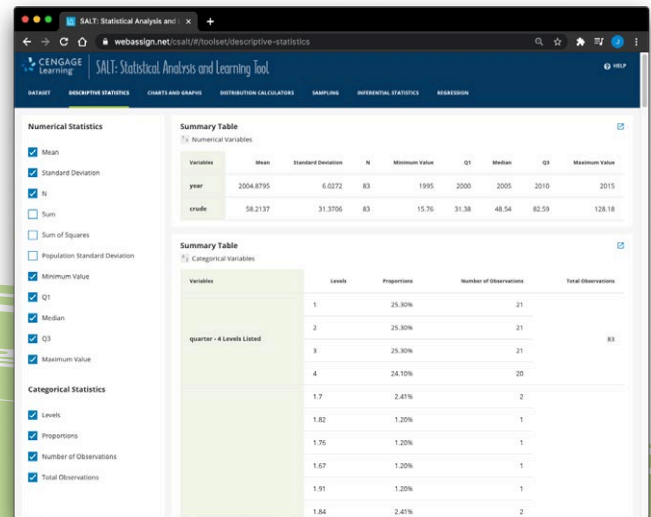
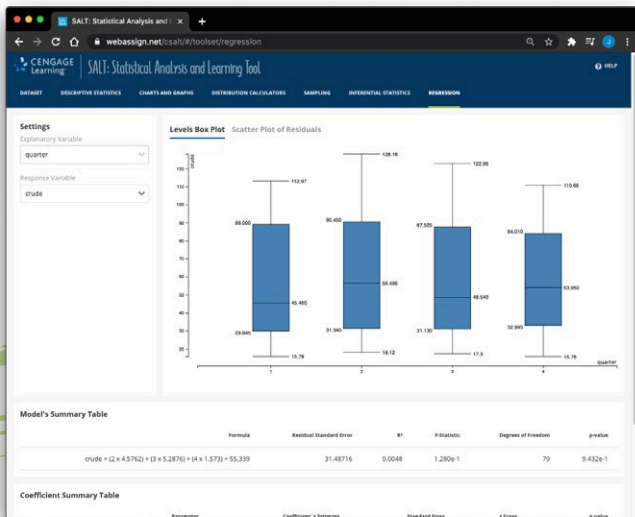
SALT: Statistical Analysis and Learning Tool

How do you get your students to understand the meaning behind data in order to think statistically?

The Statistical Analysis and Learning Tool (SALT) is designed by statisticians, for statisticians, to help you get introductory students deeply engaged in data manipulation, analysis, and interpretation without getting bogged down in complex computations. After years of development in partnership with statistics educators and in-class testing by instructors and students, SALT is fully integrated into *WebAssign* questions.

The result? Engaged students able to visualise statistics with a deeper conceptual understanding of the meaning behind data.

- With just one click, data sets within applicable *WebAssign* questions are automatically imported for students to manipulate within SALT
- Instructors can choose quick access to SALT at a standalone website for instructional and testing purposes – in and out of the classroom
- Students can access SALT at a standalone website once their course has ended for use in their subsequent courses or projects



NEED AN INSPECTION COPY OR WEBASSIGN DEMO?

Find your learning consultant



au.cengage.com/repfinder



anz.highered@cengage.com

DISCOVER eLEARNING

Introduce the flexibility of digital to your classroom. Explore the possibilities of more than 20,000 course materials including eBooks, digital-first content and online solutions that work with your LMS

au.cengage.com/university

Vital
source



moodle

canvas



@CengageANZ



@CengageANZ



CengageANZ



youtube.com/CengageLearningAU

