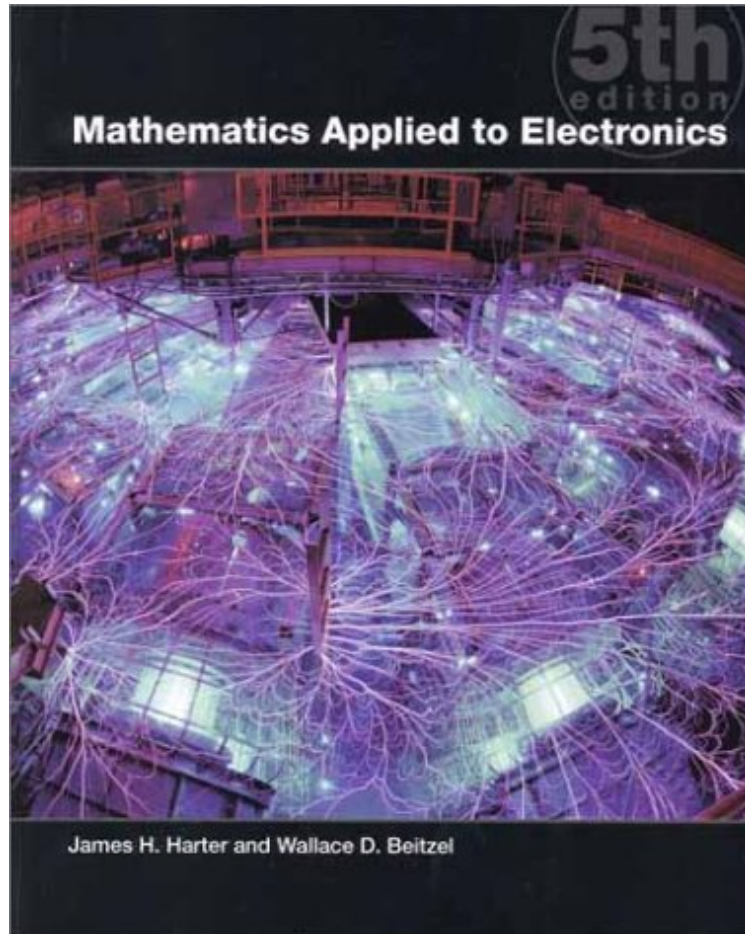


[Pdf free] Mathematics Applied to Electronics (5th Edition)

Mathematics Applied to Electronics (5th Edition)

James H. Harter, Wallace Beitzel
audiobook | *ebooks | Download PDF | ePub | DOC



[Download](#)

[Read Online](#)

#2007349 in Books 2000-12-15Original language:EnglishPDF # 1 9.25 x 7.50 x 1.25l, 1.10 #File Name: 0130171840768 pages | File size: 33.Mb

James H. Harter, Wallace Beitzel : Mathematics Applied to Electronics (5th Edition) before purchasing it in order to gage whether or not it would be worth my time, and all praised Mathematics Applied to Electronics (5th Edition):

0 of 0 people found the following review helpful. This book is great at step by step detailBy Rachel KThis is exactly like the newest edition except some challenge problems. But most likely your professor will have you work the regular problems instead as mine did. The problems are the same as the new one. For example; Edition 5: 1) $3x + 2 = 8$ find x Edition 6: 1) $3x + 2 = 8$ find x . I saved so much money this way. When the professor refers to something just ask what table number it is or section because the extra added challenges at the end changed the page numbers.This book explains things very well also. I absolutely love this book.4 of 4 people found the following review helpful. Good referenceBy Justin A.I "used" this book for a college course. My course never required any reading from this book or and homework problems from this book, so I mostly just used it when I needed an on hand refernce to the problems I was solving. For that purpose it worked great.Little peeved at the instructor for requiring us to purchase the book when

we actually didn't need it but that is not the books fault.0 of 0 people found the following review helpful. so maybe make your order situation more clear for peops like me.By CustomerI was able to return it, but I had to pay for shipping, so my son said I may have inadvertently ordered this when I went with the cheaper book, it automatically flipped me into an older edition, so maybe make your order situation more clear for peops like me. thanks

For undergraduate college-level courses in Mathematics for Electronics, Algebra/Trigonometry for Electronics Technology, Tech Math (Algebra and Trigonometry) for Electronics, Computer, Automation, and Electromechanics. This book provides an introduction to mathematics applied to electronics, computers, electromechanics, and automation. Organized to be compatible with electric circuits books currently in use, the book's content balances a formal proof-orientation against the need for expediency in developing a broad, general mathematics ability.

From the Inside Flap
PREFACE The purpose of this book is to provide an understanding of mathematics as it is applied to electronics. The text may be used in a formal classroom setting or in a self-paced or self-study program. Mathematics Applied to Electronics is for studying technology related to electronics, computers, electromechanics, or automation. Modern electronics curriculums need the support of a large and diverse amount of mathematics, so the content of this text is a trade-off between a formal proof orientation and the need for expediency in developing a broad, general mathematics ability. The sequence of chapters and topics within each chapter have been planned to be compatible with the electric circuits books currently in use. The scientific calculator is an integral part of the text, and its introduction early in the book enhances the learning process. **NEW TO THE FIFTH EDITION** Chapter 2, "Number Notation and Operation," is rewritten with an emphasis on precision rounding and number notation. Chapter 3, "Quantities and Units of Measurement," is updated to IEEE/ASTM SI 10-1997 standards to provide readers with the most current standards for applying the SI systems to electronics. Expanded coverage of metrology concepts in Chapter 12, "Applying Mathematics to Electrical Concepts." New Chapter 32, "Mathematics of Computer Logic," offers readers a comprehensive introduction to digital logic. New Glossary provides readers with a single place to locate all key terms in the text. **TEXT ORGANIZATION** The book begins with selected topics in prealgebra, number notation, and units of measurement, which are followed by several chapters dealing with the fundamentals of algebra, including the evaluation of formulas. This series of chapters culminates with a chapter devoted to the solution of linear equations, which is followed by a chapter that applies mathematics to electronic circuits. The text is structured so that each section of theoretical chapters is followed by one or more application chapters. The application chapters reinforce materials previously presented and provide the learner with an opportunity to transfer mathematical skills to electronics concepts. Interspersed throughout the book are chapters and topics dealing with graphing and graphical analysis. These chapters are essential because so much valuable information is presented in graphical form in handbooks and data sheets. Following chapters dealing with quadratic equations and exponents and radicals are chapters covering logarithmic, exponential, and trigonometric functions. These topics are followed by a series of chapters covering the mathematics of alternating current. The text concludes with chapters dealing with math analysis, computer number systems, and computer logic. **FEATURES** This book has been designed to guide the reader through the learning process by providing a means of coordinating the instruction in the classroom with outside assignments. The reader is helped by hundreds of detailed examples, figures, graphs, and problems. The utilization of the SI system of measurement throughout the text enables the user to make an easy transition to any technology book in use today. A companion website is available for this text. It contains multiple choice questions for each chapter as well as short answer and/or problem solving questions for Chapters 2-6. This website also contains Syllabus Manager, which instructors can use to easily create and revise syllabi. Syllabus Manager includes direct links into companion website and other online content. **ACKNOWLEDGMENTS** In closing, we wish to thank you, the adopters of this and the previous editions of Mathematics Applied to Electronics, for your helpful comments and suggestions and for your diligence in bringing oversights and omissions to our attention. We acknowledge all of you who have communicated with us, including Roger Harlow, Archie Gillespie, and Anna Spear. We also thank the reviewers of this edition: Nasser Hedayat, Valencia Community College; Barbara Miller, University of Alaska; Saeed A. Shaikh, Miami-Dade Community College; and Stephen Trudeau, Denver Technical College. Proposals for improvement, questions about problems, or comments on the content may be made by writing us in care of the publisher. **SUPPLEMENTS** It is our sincere intention to provide high-quality materials for your use. To that end, adopters of the text may request (from the publisher) a complimentary package of materials, including a detailed Instructor's Solutions Manual, Transparency Masters, an extensive Text Item File, and a Windows-based Prentice Hall Test Manager (electronic version of the Test Item File). Again, thank you for your continued support. James Harter Surprise, Arizona 2000 Wallace Beitzel Redondo Beach, California 2000
From the Back Cover The text requires knowledge of only mathematics fundamentals. It introduces new mathematical concepts in a direct manner reinforced by hundreds of examples, scores of realistic pictorials and figures, dozens of calculator drills and review summaries, and problem sets. In all, this fifth edition provides more than 4,600 exercises and more than 600 examples. New to the Fifth Edition: Chapter 2, "Number Notation and Operation," is rewritten with an emphasis on precision rounding and number notation. Chapter 3,

"Quantities and Units of Measurement," is updated to IEEE/ASTM SI 10-1997 standards to provide readers with the most current standards for applying the SI system to electronics. Expanded coverage of metrology concepts in Chapter 12, "Applying Mathematics to Electrical Concepts." New Chapter 32, "Mathematics of Computer Logic," offers readers a comprehensive introduction to digital logic. New Glossary provides readers with a single place to locate all key terms in the text. Other features: Consistent reading level throughout. Integrated use of the scientific calculator. Authoritative use of SI units and conventional metric practices with electronics. In-depth treatment of graphing functions, empirical data, and the interpretation of graphs. Comprehensive coverage of computer number systems and computer logic commonly associated with automation controls and digital equipment. End-of-chapter definitions of key terms. Answers to all odd-numbered problems, including many detailed graphical solutions, and answers to all calculator drills. Excerpt. Reprinted by permission. All rights reserved.

PREFACE The purpose of this book is to provide an understanding of mathematics as it is applied to electronics. The text may be used in a formal classroom setting or in a self-paced or self-study program. Mathematics Applied to Electronics is for studying technology related to electronics, computers, electromechanics, or automation. Modern electronics curriculums need the support of a large and diverse amount of mathematics, so the content of this text is a trade-off between a formal proof orientation and the need for expediency in developing a broad, general mathematics ability. The sequence of chapters and topics within each chapter have been planned to be compatible with the electric circuits books currently in use. The scientific calculator is an integral part of the text, and its introduction early in the book enhances the learning process.

NEW TO THE FIFTH EDITION Chapter 2, "Number Notation and Operation," is rewritten with an emphasis on precision rounding and number notation. Chapter 3, "Quantities and Units of Measurement," is updated to IEEE/ASTM SI 10-1997 standards to provide readers with the most current standards for applying the SI systems to electronics. Expanded coverage of metrology concepts in Chapter 12, "Applying Mathematics to Electrical Concepts." New Chapter 32, "Mathematics of Computer Logic," offers readers a comprehensive introduction to digital logic. New Glossary provides readers with a single place to locate all key terms in the text.

TEXT ORGANIZATION The book begins with selected topics in prealgebra, number notation, and units of measurement, which are followed by several chapters dealing with the fundamentals of algebra, including the evaluation of formulas. This series of chapters culminates with a chapter devoted to the solution of linear equations, which is followed by a chapter that applies mathematics to electronic circuits. The text is structured so that each section of theoretical chapters is followed by one or more application chapters. The application chapters reinforce materials previously presented and provide the learner with an opportunity to transfer mathematical skills to electronics concepts. Interspersed throughout the book are chapters and topics dealing with graphing and graphical analysis. These chapters are essential because so much valuable information is presented in graphical form in handbooks and data sheets. Following chapters dealing with quadratic equations and exponents and radicals are chapters covering logarithmic, exponential, and trigonometric functions. These topics are followed by a series of chapters covering the mathematics of alternating current. The text concludes with chapters dealing with math analysis, computer number systems, and computer logic.

FEATURES This book has been designed to guide the reader through the learning process by providing a means of coordinating the instruction in the classroom with outside assignments. The reader is helped by hundreds of detailed examples, figures, graphs, and problems. The utilization of the SI system of measurement throughout the text enables the user to make an easy transition to any technology book in use today. A companion website is available for this text. It contains multiple choice questions for each chapter as well as short answer and/or problem solving questions for Chapters 2-6. This website also contains Syllabus Manager, which instructors can use to easily create and revise syllabi. Syllabus Manager includes direct links into companion website and other online content.

ACKNOWLEDGMENTS In closing, we wish to thank you, the adopters of this and the previous editions of Mathematics Applied to Electronics, for your helpful comments and suggestions and for your diligence in bringing oversights and omissions to our attention. We acknowledge all of you who have communicated with us, including Roger Harlow, Archie Gillespie, and Anna Spear. We also thank the reviewers of this edition: Nasser Hedayat, Valencia Community College; Barbara Miller, University of Alaska; Saeed A. Shaikh, Miami-Dade Community College; and Stephen Trudeau, Denver Technical College. Proposals for improvement, questions about problems, or comments on the content may be made by writing us in care of the publisher.

SUPPLEMENTS It is our sincere intention to provide high-quality materials for your use. To that end, adopters of the text may request (from the publisher) a complimentary package of materials, including a detailed Instructor's Solutions Manual, Transparency Masters, an extensive Text Item File, and a Windows-based Prentice Hall Test Manager (electronic version of the Test Item File). Again, thank you for your continued support. James Harter Surprise, Arizona 2000 Wallace Beitzel Redondo Beach, California 2000