

1. Record Nr.	UNINA9910784528103321
Autore	Herrick Clyde N
Titolo	Basic electronics math [[electronic resource] /] / Clyde N. Herrick
Pubbl/distr/stampa	Boston, : Newnes, c1997
ISBN	1-281-07763-1 9786611077631 0-08-049980-5
Edizione	[1st edition]
Descrizione fisica	1 online resource (223 p.)
Disciplina	621.381/0151
Soggetti	Electronics - Mathematics Engineering mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Front Cover; Basic Electronics Math; Copyright Page; Table of Contents; Chapter 1. Arithmetic Fractions; 1.1 Introduction; 1.2 Rounding Off Numbers; 1.3 Common Fractions; 1.4 Addition of Fractions; 1.5 Subtraction of Fractions; 1.6 Mixed Numbers; 1.7 Mathematical Expressions and Terms; 1.8 Signs of Grouping; Summary; Chapter 2. Operations with Powers and Roots of Numbers; 2.1 Introduction; 2.2 Extraction of Square Roots; 2.3 Roots of Fractions; 2.4 Powers and Roots; 2.5 Higher Powers and Roots of Numbers; Summary; Chapter 3. Scientific Notation and Powers of Ten 3.1 Scientific Notation (Powers of Ten)3.2 Signs of Exponents; 3.3 Addition and Subtraction of Powers of Ten; 3.4 Multiplying with Powers of Ten; 3.5 Dividing by Powers of Ten; 3.6 Multiplication and Division Combined; 3.7 Laws of Exponents; 3.8 Raising a Power of Ten to a Power; 3.9 Taking the Root of a Power of Ten; Summary; Chapter 4. Units--Measurements and the Metric System; 4.1 Introduction; 4.2 Units for Electronics; 4.3 Ranges of Electrical Units; 4.4 Systems of Measurement; 4.5 The English System of Measurement; 4.6 The SI Metric System of Measurement 4.7 A Summary of the Most Commonly Used Metric Measurements4.8 Relationships Between the Metric and the English Systems; 4.9 The Micron and the Mil; 4.10 Style and Usage of the International System of

Units (SI); Summary; Chapter 5. Computer Numbering Systems; 5.1 Introduction; 5.2 Decimal Numbering System (Base 10); 5.3 Binary Numbering System (Base 2); 5.4 Binary to Decimal Conversion; 5.5 Decimal to Binary Conversion; 5.6 Octal Numbering System (Base 8); 5.7 Converting Binary Numbers into Octal Numbers; 5.8 Hexadecimal Numbering System (Base 16); 5.9 Addition of Binary Numbers 5.10 Addition of Octal Numbers 5.11 Additional of Hexadecimal Numbers; 5.12 Subtraction of Binary Numbers; 5.13 Two's Complement; 5.14 Eight's and Sixteen's Complement; 5.15 Subtracting Octal Numbers; Summary; Chapter 6. Introduction to Algebra; 6.1 Introduction; 6.2 Expressed and Implied Signs of Algebraic Operations; 6.3 Numerical and Literal Algebraic Expressions, Equations, and Formulas; 6.4 Terms in Algebraic Expressions, Equations, and Formulas; 6.5 Similar Terms; 6.6 Monomials, Binomials, Trinomials, and Polynomials; 6.7 Subscript and Prime Notations 6.8 Substitution of Numerical Values and Evolution 6.9 Algebraic Addition; 6.10 Algebraic Subtraction; 6.11 Addition of Polynomials; 6.12 Subtraction of Polynomials; Summary; Chapter 7. Algebraic Multiplication of Monomials and Polynomials; 7.1 Introduction; 7.2 Multiplication of Signed Numbers; 7.3 Multiplication of Signed Numbers with Exponents; 7.4 Multiplication of Monomials Containing Exponents; 7.5 Multiplication of Polynomials by Monomials; 7.6 Multiplication of a Polynomial by Another Polynomial; Summary; Chapter 8. Division of Monomials and Polynomials; 8.1 Introduction 8.2 Subtraction of Exponents

---

### Sommario/riassunto

Most students entering an electronics technician program have an understanding of mathematics. Basic Electronics Math provides a practical application of these basics to electronic theory and circuits. The first half of Basic Electronics Math provides a refresher of mathematical concepts. These chapters can be taught separately from or in combination with the rest of the book, as needed by the students. The second half of Basic Electronics Math covers applications to electronics. Basic concepts of electronics math. Numerous problems and examples. Uses real-world appli

---