Record Nr. UNINA9910458435803321 Autore Epperson James F **Titolo** Solutions Manual to Accompany An Introduction to Numerical Methods and Analysis [[electronic resource]] Hoboken,: Wiley, 2014 Pubbl/distr/stampa **ISBN** 1-118-55213-X 1-118-78937-7 1-118-78938-5 Edizione [2nd ed.] Descrizione fisica 1 online resource (319 p.) Disciplina 518 Soggetti **Mathematics** Numerical analysis -- Handbooks, manuals, etc Numerical analysis Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di contenuto Cover page; Half-Title page; Title page; Copyright page; CONTENTS; Preface to the Solutions Manual; CHAPTER 1: INTRODUCTORY CONCEPTS AND CALCULUS REVIEW: 1.1 BASIC TOOLS OF CALCULUS: 1.2 ERROR, APPROXIMATE EQUALITY, AND ASYMPTOTIC ORDER NOTATION: 1.3 A PRIMER ON COMPUTER ARITHMETIC: 1.4 A WORD ON COMPUTER LANGUAGES AND SOFTWARE; 1.5 SIMPLE APPROXIMATIONS; 1.6 APPLICATION: APPROXIMATING THE NATURAL LOGARITHM: 1.7 A BRIEF HISTORY OF COMPUTING; CHAPTER 2: A SURVEY OF SIMPLE METHODS AND TOOLS; 2.1 HORNER'S RULE AND NESTED MULTIPLICATION; 2.2 DIFFERENCE APPROXIMATIONS TO THE DERIVATIVE 2.3 APPLICATION: EULER'S METHOD FOR INITIAL VALUE PROBLEMS2.4

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A solutions manual to accompany An Introduction to Numerical Methods and Analysis, Second EditionAn Introduction to Numerical Methods and Analysis, Second Edition reflects the latest trends in the field, includes new material and revised exercises, and offers a unique emphasis on applications. The author clearly explains how to both construct and evaluate approximations for accuracy and performance, which are key skills in a variety of fields. A wide range of higher-level methods and solutions, including new topics such as the roots of polynomials, spectral collocation, finite element ideas,