Record Nr. UNINA9910876537103321 Autore Bernstein Matt A Titolo Thinking about equations: a practical guide for developing mathematical intuition in the physical sciences and engineering / / Matt A. Berstein, William A. Friedman Wiley, : Hoboken, N.J., c2009 Pubbl/distr/stampa **ISBN** 1-118-21064-6 1-282-18840-2 9786612188404 0-470-49503-0 0-470-49502-2 Descrizione fisica 1 online resource (274 p.) Altri autori (Persone) FriedmanWilliam A (William Alan) Disciplina 515 Soggetti Mathematical analysis Physical sciences - Mathematics **Engineering mathematics** Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto THINKING ABOUT EQUATIONS: CONTENTS: Preface: Acknowledgments: List of Worked-Out Example Problems; 1 Equations Representing Physical Quantities; 2 A Few Pitfalls and a Few Useful Tricks; 3 Limiting and Special Cases; 4 Diagrams, Graphs, and Symmetry; 5 Estimation and Approximation; 6 Introduction to Dimensional Analysis and Scaling; 7 Generalizing Equations; 8 Several Instructive Examples; Index Sommario/riassunto An accessible guide to developing intuition and skills for solving mathematical problems in the physical sciences and engineering Equations play a central role in problem solving across various fields of study. Understanding what an equation means is an essential step toward forming an effective strategy to solve it, and it also lays the foundation for a more successful and fulfilling work experience. Thinking About Equations provides an accessible guide to developing an intuitive understanding of mathematical methods and, at the same

time, presents a number of practical mathem