Record Nr. UNINA9910768462703321 Autore Walz Guido Titolo Foundations of Mathematics: A Preparatory Course / / by Guido Walz, Frank Zeilfelder, Thomas Rießinger Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2023 **ISBN** 3-662-67809-8 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (450 pages) Altri autori (Persone) ZeilfelderFrank RießingerThomas Disciplina 510 Soggetti Mathematics Mathematical analysis Algebras, Linear **Analysis** Linear Algebra Àlgebra lineal Anàlisi matemàtica Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction and preface -- Elementary methods of calculation --Nota di contenuto Fundamentals of functions -- Equations and inequalities -- Geometry -- Introduction to linear algebra -- Differential and integral calculus --Fundamentals of probability -- Descriptive statistics -- Complex numbers -- Collection of formulas -- Solutions to the exercises --Literature -- Index. Sommario/riassunto This book spares you the entry-level problems of mathematics by entertainingly building a bridge that gently guides you over any shoals and into the heart of college mathematics. The bridge starts on one side with simple number crunching, as you probably encountered it in middle school, and takes you across to the basics of linear algebra,

differential calculus, and probability, which will be the main content of your first few semesters. You will always face this content there, and when dealing with it you can then say with confidence, "I know it

already!" The authors have succeeded in writing a mathematics book for students of all disciplines and continuing professional education that is easy to read from cover to cover without getting lost in formalism or humorless dryness, but that nevertheless left you with the necessary knowledge and technical confidence after reading it. Each chapter is accompanied by exercises that can be used to practice and reinforce the content taught. This book is a translation of the original German edition Brückenkurs Mathematik by Guido Walz, Frank Zeilfelder and Thomas Rießinger, 4th edition, published by Springer-Verlag GmbH, DE in 2014. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. Voices to the 1st edition 'At last, an engaging, successful preparatory course that accurately highlights the elementary but essential basic concepts.' Priv.-Doz. Dr. Frank Hettlich, University of Karlsruhe 'Easy to read and compile work that is very convincing due to its entertaining nature.' Prof. Dr. Sax Kreutz, University of Applied Sciences, Hamburg.