1. Record Nr. UNINA9910797336503321 Autore Denes J. Titolo Latin squares and their applications // J. Denes, A. D. Keedwell Pubbl/distr/stampa Amsterdam, [Netherlands]:,: Academic Press,, 2015 ©2015 **ISBN** 0-444-63558-0 0-444-63555-6 [Second edition.] Edizione Descrizione fisica 1 online resource (439 p.) Disciplina 512.9/25 Soggetti Magic squares 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 ""Front Cover""; ""Latin Squares and their Applications""; ""Copyright""; ""Foreword to the First Edition""; ""Contents""; ""Preface to the First Edition""; ""Acknowledgements (First Edition)""; ""Preface to the Second Edition""; ""Chapter 1: Elementary Properties""; ""1.1 The Multiplication Table of a Quasigroup""; ""1.2 The Cayley Table of a Group""; ""1.3 Isotopy""; ""1.4 Conjugacy and Parastrophy""; ""1.5 Transversals and Complete Mappings""; ""1.6 Latin Subsquares and Subquasigroups""; ""Chapter 2: Special Types of Latin Square""; ""2.1 Quasigroup Identities and Latin Squares"" ""2.2 Quasigroups of Some Special Types and the Concept of Generalized Associativity"""2.3 Triple Systems and Quasigroups""; ""2.4 Group-Based Latin Squares and Nuclei of Loops""; ""2.5 Transversals in Group-Based Latin Squares""; ""2.6 Complete Latin Squares""; ""Chapter 3: Partial Latin Squares and Partial Transversals""; ""3.1 Latin Rectangles and Row Latin Squares""; ""3.2 Critical Sets and Sudoku Puzzles""; ""3.3 Fuchsa€? Problems""; ""3.4 Incomplete Latin Squares and Partial Quasigroups""; ""3.5 Partial Transversals and Generalized Transversals"" ""Chapter 4: Classification and Enumeration of Latin Squares and Latin Rectangles"""4.1 The Autotopism Group of a Quasigroup""; ""4.2 Classification of Latin Squares""; ""4.3 History of the Classification and Enumeration of Latin Squares""; ""4.4 Enumeration of Latin Rectangles""; ""4.5 Enumeration of Transversals""; ""4.6 Enumeration of Subsquares"";

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Sommario/riassunto

Latin Squares and Their Applications Second edition offers a long-awaited update and reissue of this seminal account of the subject. The revision retains foundational, original material from the frequently-cited 1974 volume but is completely updated throughout. As with the earlier version, the author hopes to take the reader 'from the beginnings of the subject to the frontiers of research'. By omitting a few topics which are no longer of current interest, the book expands upon active and emerging areas. Also, the present state of knowledge regarding the 73 then-unsolved problems given at the