1. Record Nr. UNINA9910437870703321 Autore Marr Alison M Titolo Magic Graphs / / by Alison M. Marr, W.D. Wallis New York, NY:,: Springer New York:,: Imprint: Birkhäuser,, 2013 Pubbl/distr/stampa **ISBN** 0-8176-8391-7 Edizione [2nd ed. 2013.] Descrizione fisica 1 online resource (198 p.) Disciplina 511.5 Soggetti Combinatorial analysis Computer science—Mathematics Applied mathematics **Engineering mathematics** Combinatorics Discrete Mathematics in Computer Science Applications of Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes Index. Nota di bibliografia Includes bibliographical references (pages [163]-169) and index. Preface -- List of Figures -- Preliminaries -- Edge-Magic Total Nota di contenuto Labelings -- Vertex-Magic Total Labelings -- Totally Magic Labelings -- Magic Type Labeling of Digraphs -- Notes on the Research Problems -- References -- Bibliography -- Answers to Selected Exercises --Index. Sommario/riassunto Magic squares are among the more popular mathematical recreations. Over the last 50 years, many generalizations of "magic" ideas have been applied to graphs. Recently there has been a resurgence of interest in "magic labelings" due to a number of results that have applications to the problem of decomposing graphs into trees. Key features of this second edition include: · a new chapter on magic labeling of directed graphs · applications of theorems from graph theory and interesting counting arguments . problems and exercises covering a range of difficulties · updated bibliography and index This concise, self-contained exposition is unique in its focus on the theory of magic graphs/labelings. It may

serve as a graduate or advanced undergraduate text for courses in mathematics or computer science, and as reference for the researcher.