

1. Record Nr.	UNINA9910967362203321
Autore	Gerdes Paulus
Titolo	Adventures in the world of matrices / / Paulus Gerdes
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2007
ISBN	1-60692-755-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (208 p.)
Collana	Contemporary mathematical studies
Disciplina	512.9/434
Soggetti	Matrices Algebra
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- ADVENTURES IN THEWORLD OF MATRICES -- NOTICE TO THE READER -- ACKNOWLEDGEMENTS -- CONTENTS -- PREFACE -- PRESENTATION -- THE CONCEPT OF A MATRIX -- ABSTRACT -- MULTIPLICATION OF A MATRIX BY A SCALAR -- ADDITION OF MATRICES -- MULTIPLICATION OF SQUARE MATRICES -- ACTIVITIES -- IDENTITY MATRIX -- HISTORICAL NOTE -- NOTATIONS -- CYCLES OF NUMBERS -- ABSTRACT -- SOME MATRICES OF ALTERNATING CYCLES -- ABSTRACT -- ACTIVITY -- ACTIVITIES -- ALTERNATING CYCLE MATRICES OF DIMENSIONS4 BY 4. FIRST PART -- ABSTRACT -- ACTIVITIES -- ACTIVITY -- ACTIVITIES -- ACTIVITY -- ALTERNATING CYCLE MATRICES OF DIMENSIONS4 BY 4. SECOND PART -- ABSTRACT -- ACTIVITIES -- Theorem 5.1. -- ACTIVITY -- ACTIVITIES -- ALTERNATING CYCLE MATRICES OF DIMENSIONS 4BY 4. THIRD PART: MULTIPLICATION TABLE -- ABSTRACT -- ACTIVITIES -- ANSWERS -- ACTIVITY -- ACTIVITIES -- ACTIVITY -- ACTIVITIES -- MORE PROPERTIES OF ALTERNATING CYCLEMATRICES OF DIMENSIONS 4 BY 4 -- ABSTRACT -- ACTIVITIES -- ACTIVITY -- ACTIVITIES -- ACTIVITIES -- ACTIVITY -- ACTIVITY -- NEGATIVE ALTERNATING CYCLE MATRICESOF DIMENSIONS 6 BY 6 -- ABSTRACT -- ACTIVITY -- ACTIVITY -- ACTIVITIES -- ACTIVITY -- MULTIPLICATION OF NEGATIVE ALTERNATINGCYCLE MATRICES OF DIMENSIONS 6 BY 6 -- ABSTRACT -- ACTIVITIES -- ACTIVITIES -- ACTIVITIES -- MULTIPLICATION OF POSITIVE AND NEGATIVEALTERNATING CYCLE MATRICES OFDIMENSIONS 6 BY 6 -- ABSTRACT -- ACTIVITIES -- ACTIVITIES --

ALTERNATING CYCLE MATRICES OF EVEN DIMENSIONS -- ABSTRACT --  
 ACTIVITIES -- ACTIVITY -- ACTIVITIES -- ACTIVITY -- GENERAL  
 HYPOTHESES ABOUT ALTERNATING CYCLE MATRICES OF EVEN  
 DIMENSIONS -- ABSTRACT -- ACTIVITIES -- ACTIVITY -- Hypothesis 1a  
 -- Hypothesis 1b -- Hypothesis 2a -- Hypothesis 2b -- ACTIVITIES --  
 ACTIVITY -- Hypothesis 3a -- Hypothesis 3b -- Hypothesis 3c --  
 Hypothesis 4 -- Hypothesis 5 -- ACTIVITY -- ALTERNATING CYCLE  
 MATRICES OF DIMENSIONS 5 BY 5.  
 ABSTRACT -- ACTIVITY -- ACTIVITY -- ACTIVITIES -- ACTIVITIES --  
 ACTIVITY -- ACTIVITY -- ACTIVITIES -- MULTIPLICATION OF POSITIVE  
 AND NEGATIVE ALTERNATING CYCLE MATRICES OF DIMENSIONS 3 BY 3  
 -- ABSTRACT -- ACTIVITIES -- ACTIVITY -- ACTIVITIES -- ACTIVITIES  
 -- 14.1. A Surprising Property of the Multiplication Tables --  
 ALTERNATING CYCLE MATRICES OF DIMENSIONS 7 BY 7 -- ABSTRACT --  
 ACTIVITIES -- ACTIVITIES -- MULTIPLICATION TABLES OF BASIC  
 POSITIVE AND NEGATIVE ALTERNATING CYCLE MATRICES OF  
 DIMENSIONS 7 BY 7 -- ABSTRACT -- ACTIVITY -- ACTIVITIES --  
 ACTIVITIES -- ACTIVITY -- CYCLIC STRUCTURE OF MULTIPLICATION  
 TABLES -- ABSTRACT -- ACTIVITIES -- QUESTIONS FOR REFLECTION --  
 MULTIPLICATION TABLES OF BASIC POSITIVE AND NEGATIVE  
 ALTERNATING CYCLE MATRICES OF DIMENSIONS 6 BY 6 -- ABSTRACT --  
 ACTIVITY -- ACTIVITIES -- QUESTIONS FOR REFLECTION -- OUTLINE OF  
 A PROOF -- ABSTRACT -- MULTIPLICATION OF BASIC POSITIVE  
 ALTERNATING CYCLE MATRICES OF EVEN DIMENSIONS: FORMULATION  
 OF HYPOTHESES -- ABSTRACT -- ACTIVITIES -- ACTIVITY --  
 ACTIVITIES -- MULTIPLICATION OF BASIC POSITIVE ALTERNATING CYCLE  
 MATRICES OF EVEN DIMENSIONS: SOME PROOFS -- ABSTRACT --  
 ACTIVITY -- ACTIVITY -- ACTIVITIES -- ACTIVITIES OF PROOF --  
 ABSTRACT -- ACTIVITY -- ACTIVITIES -- Theorem 22.1. -- Theorem  
 22.2. -- ACTIVITY -- Theorem 22.3. -- Theorem 22.4. -- Theorem  
 22.5. -- Theorem 22.6. -- Theorem 22.7. -- Theorem 22.8. --  
 Theorem 22.9. -- Theorem 22.10. -- Theorem 22.11. -- ACTIVITIES --  
 Theorem 22.12. -- Theorem 22.13. -- CYCLE MATRICES OF  
 DIMENSIONS 6 BY 6 AND OF PERIOD 3 -- ABSTRACT -- ACTIVITIES --  
 ACTIVITIES -- ACTIVITIES -- ACTIVITIES -- ACTIVITIES -- OTHER  
 PERIODIC CYCLE MATRICES OF DIMENSIONS 6 BY 6 -- ABSTRACT --  
 ACTIVITIES -- Theorem 24.1. -- PERIOD 4 -- PERIOD 6 -- ACTIVITY --  
 PERIODIC CYCLE MATRICES OF ODD DIMENSIONS -- ABSTRACT --  
 ACTIVITIES -- ACTIVITY -- THE WORLD OF THE PERIODIC CYCLE  
 MATRICES.  
 ABSTRACT -- Theorem 26.1a. -- Theorem 26.1b. -- Theorem 26.2a.  
 -- Theorem 26.2a. -- ACTIVITIES -- Theorem 26.3a. -- Theorem 26.3  
 b. -- Theorem 26.3c. -- Theorem 26.4. -- Theorem 26.5. -- Theorem  
 26.6. -- DISCOVER THE WORLD OF THE CYCLE MATRICES -- ABSTRACT --  
 -- CYCLE MATRICES, GENETIC MATRICES AND THE GOLDEN SECTION --  
 ABSTRACT -- ACTIVITY -- BIBLIOGRAPHY -- CYCLE MATRICES AND  
 LIKI-DESIGNS -- HELIX, CYLINDER AND CHESS MATRICES -- GENETIC  
 MATRICES (CHAPTER 28) -- LUNDA-DESIGNS AND TRADITIONAL  
 DRAWINGS FROM ANGOLA -- NOTE ON THE USE OF A COMPUTER --  
 APPENDICES -- INVERSE MATRICES -- ACTIVITY -- ACTIVITY --  
 DETERMINANTS -- ACTIVITIES -- TRANSFORMATIONS OF ALTERNATING  
 CYCLE MATRICES. PERMUTATIONS -- ACTIVITY -- ACTIVITIES --  
 ACTIVITIES -- ACTIVITIES -- POLYGONAL AND CIRCULAR  
 REPRESENTATIONS -- ACTIVITIES -- ACTIVITIES -- ACTIVITIES --  
 INDEX.

presented for those readers who do not yet know the concepts. Then, starting and experimenting with cycle matrices of low dimensions and engaging the readers in various activities, beautiful results are obtained with attractive geometrical interpretation. Gradually the results are extended to cycle matrices of higher dimensions and then generalised. A note is included for those readers who would like to use a computer in exploring cycle matrices. Two appendices give the possibility to further use the computer by exploring inverses matrices and determinants.

2. Record Nr.	UNINA9910299438303321
Autore	Hosseini Majid
Titolo	Application of the SWAT Model for Water Components Separation in Iran // by Majid Hosseini, Muhammad Aqeel Ashraf
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2015
ISBN	4-431-55564-1
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (113 p.)
Collana	Springer Hydrogeology, , 2364-6454
Disciplina	551.48 551.4801/1
Soggetti	Hydrogeology Hydrology Geographic information systems Hydrology/Water Resources Geographical Information Systems/Cartography
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Effect of Land Use Changes on Water Balance and Sediment Yield -- Effect of Land Use Changes on Water Balance and Sediment Yield in Iran -- Taleghan Catchment -- Effect of Land Use Changes on Water Balance in Taleghan Catchment, Iran: A Case Study.
Sommario/riassunto	Water balance studies for large and small river basins are the subject of this book. Here, the specific focus is on the soil and water assessment tools (SWAT) model coupled with geographic information system (GIS)

remote sensing data for a comprehensive study. Some books available in the market provide an overview of different hydrological models for water balance but not specifically for the SWAT model. This book effectively utilizes the SWAT model to study the water balances in small and large catchments with consistent competence and excellent accuracy for yearly and monthly water balance modules along with suspended sediment yield over several slope classes of the catchments. The approach is new and has been successfully utilized, as discussed in a case study on the Taleghan Catchment in Iran. These implementation models may assist as advantageous techniques for incorporated management of catchments in the direction of sustainable development. This book will help readers who wish to study all the changes related to those in water balances.

---