1.	Record Nr.	UNINA9910137424103321
	Autore	Mezei Razvan A. <1982->
	Titolo	An introduction to SAGE programming : with applications to SAGE interacts for numerical methods / / Razvan A. Mezei
	Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2016 ©2016
	ISBN	1-119-12280-5 1-119-12279-1
	Descrizione fisica	1 online resource (245 p.)
	Classificazione	MAT034000
	Disciplina	518/.6
	Soggetti	Mathematics - Data processing Numerical analysis - Data processing Computer programming
	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	Machine generated contents note: Preface vii 1. INTRODUCTION 1 1.1 What is Sage Math? 1 1.2 Various Flavors of Sage Math 1 1.2.1 Sage Math on your Machine 1 1.2.2 Sage Cell 2 1.2.3 Sage Cloud 2 2. USING SAGE MATH AS A CALCULATOR 5 2.1 First Sage Math Examples 5 2.2 Computations 6 2.2.1 Basic Arithmetic Operators 6 2.2.2 Decimals vs Exact Values 10 2.2.3 Constants 11 2.2.4 Breaking Long Lines of Code 12 2.2.5 Comments 13 2.2.6 Library Functions 14 2.2.7 Working with Strings 17 2.2.8 Solving equations and inequalities 19 2.2.9 Calculus Functions 21 2.2.10 Exercises 25 2.3 Graphs 28 2.3.1 2D Graphs 28 2.3.2 3D Graphs 53 2.3.3 Exercises 54 3. INTRODUCTION TO PROGRAMMING IN SAGE 57 3.1 Variables 58 3.1.1 Exercises 61 3.2 More on Operators 61 3.2.1 Exercises 63 3.3 Making Decisions 64 3.3.1 Boolean Expressions 64 3.3.2 If statements 66 3.3.3 Exercises 73 3.4 Loops 75 3.4.1 For loops 75 3.4.2 Strings 82 3.4.3 While loops 84 3.4.4 Nested loops 88 3.4.5 Lists 91 3.4.6 Exercises 96 3.5 Functions 99 3.5.1 Using library functions. Random, Scipy, Numpy 104 3.5.2 Exercises 105 3.6 Interacts 107 3.6.1 Exercises 123 3.7 Application to Data Security: Caesar's Cipher. Interacts, strings, and encryption 125 3.7.1 Exercises 127 3.8 Application to Business: Present Value of an

| Sommario/riassunto | "An Introduction to SAGE Programming: With Applications to SAGE Interacts for Numerical Methods emphasizes how to implement numerical methods using SAGE Math and SAGE Interacts and also addresses the fundamentals of computer programming, including if statements, loops, functions, and interacts"-- |