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	Autore	Moore Will H. <1962-2017.>
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	Nota di contenuto	Frontmatter -- Contents -- List of Figures -- List of Tables -- Preface -- Part I. Building Blocks -- Chapter One. Preliminaries Math -- Chapter Two. Algebra Review -- Chapter Three. Functions, Relations, and Utility -- Chapter Four. Limits and Continuity, Sequences and Series, and More on Sets -- Part II. Calculus in One Dimension -- Chapter Five. Introduction to Calculus and the Derivative -- Chapter Six. The Rules of Differentiation -- Chapter Seven. The Integral -- Chapter Eight. Extrema in One Dimension -- Part III. Probability -- Chapter Nine. An Introduction to Probability -- Chapter Ten. An Introduction to (Discrete) Distributions -- Chapter Eleven. Continuous Distributions -- Part IV. Linear Algebra -- Chapter Twelve. Fun with Vectors and Matrices -- Chapter Thirteen. Vector Spaces and Systems of Equations -- Chapter Fourteen. Eigenvalues and Markov Chains -- Part V. Multivariate Calculus and Optimization -- Chapter Fifteen. Multivariate Calculus -- Chapter Sixteen. Multivariate Optimization -- Chapter Seventeen. Comparative Statics and Implicit Dierentiation -- Bibliography -- Index
	Sommario/riassunto	Political science and sociology increasingly rely on mathematical modeling and sophisticated data analysis, and many graduate programs in these fields now require students to take a "math camp" or a semester-long or yearlong course to acquire the necessary skills. Available textbooks are written for mathematics or economics majors,

and fail to convey to students of political science and sociology the reasons for learning often-abstract mathematical concepts. A Mathematics Course for Political and Social Research fills this gap, providing both a primer for math novices in the social sciences and a handy reference for seasoned researchers. The book begins with the fundamental building blocks of mathematics and basic algebra, then goes on to cover essential subjects such as calculus in one and more than one variable, including optimization, constrained optimization, and implicit functions; linear algebra, including Markov chains and eigenvectors; and probability. It describes the intermediate steps most other textbooks leave out, features numerous exercises throughout, and grounds all concepts by illustrating their use and importance in political science and sociology. Uniquely designed and ideal for students and researchers in political science and sociology Uses practical examples from political science and sociology Features "Why Do I Care?" sections that explain why concepts are useful Includes numerous exercises Complete online solutions manual (available only to professors, email david.siegel at duke.edu, subject line "Solution Set") Selected solutions available online to students