

1. Record Nr.	UNINA9910763591003321
Autore	Sobot Robert
Titolo	Engineering Mathematics by Example [[electronic resource]] : Vol. III: Special Functions and Transformations // by Robert Sobot
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-41203-6
Edizione	[2nd ed. 2024.]
Descrizione fisica	1 online resource (226 pages)
Disciplina	621.3815
Soggetti	Electronic circuits Signal processing Engineering mathematics Electronic Circuits and Systems Signal, Speech and Image Processing Engineering Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Basic Number Theory -- Polynomials -- Linear Equations and Inequalities -- Exponential and Logarithmic Functions -- Trigonometry -- Complex Algebra -- Linear Algebra -- Limits -- Derivatives -- Function Analysis -- Integrals -- Multivariable Functions -- Complex Functions in Engineering and Science -- Differential Equations -- Special Functions -- Convolution Integral -- Series -- Discrete Convolution Sum -- Fourier Integral -- Discrete Fourier Integral.
Sommario/riassunto	This textbook is a complete, self-sufficient, self-study/tutorial-type source of mathematical problems. It serves as a primary source for practicing and developing mathematical skills and techniques that will be essential in future studies and engineering practice. Rigor and mathematical formalism is drastically reduced, while the main focus is on developing practical skills and techniques for solving mathematical problems, given in forms typically found in engineering and science. These practical techniques are split into three separate books: the topics of algebra, complex algebra, and linear algebra (Vol. I), calculus of single and multiple argument functions (Vol. II), and continuous and discrete Convolution and Fourier integrals/sums of typical functions

used in signal processing, in addition to Laplace transform examples (Vol. III). Offers a large collection of progressively more sophisticated mathematical problems on main mathematical topics required for engineers/scientists; Provides, at the beginning of each topic, a brief review of definitions and formulas that are about to be used and practiced in the following problems; followed by the additional in-line reminders embedded at the key points of most solutions; Includes tutorial-style, complete solutions, to all problems.
