Record Nr. UNINA9910437873703321 Autore Rosazza Gianin Emanuela Titolo Mathematical Finance: Theory Review and Exercises: From Binomial Model to Risk Measures / / by Emanuela Rosazza Gianin, Carlo Sgarra Pubbl/distr/stampa Cham: .: Springer International Publishing: .: Imprint: Springer. . 2013 **ISBN** 3-319-01357-2 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (X, 285 p.) Collana La Matematica per il 3+2, , 2038-5757 ; ; 70 Disciplina 519.24 Soggetti **Probabilities** Finance **Statistics Probability Theory** Financial Economics Statistics in Business, Management, Economics, Finance, Insurance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto 1 Short review of Probability and of Stochastic Processes -- 2 Portfolio Optimization in Discrete time Models -- 3 Binomial Model for Option Pricing -- 4 Absence of arbitrage and Completeness of market models -- 5 Itô's Formula and Stochastic Differential Equations -- 6 Partial Differential Equations in Finance -- 7 Black-Scholes model for Option Pricing and Hedging Strategies -- 8 American Options -- 9 Exotic Options -- 10 Interest Rate Models -- 11 Pricing Models beyond Black-Scholes -- 12 Risk Measures: Value at Risk and beyond. Sommario/riassunto The book collects over 120 exercises on different subjects of Mathematical Finance, including Option Pricing, Risk Theory, and Interest Rate Models. Many of the exercises are solved, while others are only proposed. Every chapter contains an introductory section illustrating the main theoretical results necessary to solve the exercises. The book is intended as an exercise textbook to accompany graduate courses in mathematical finance offered at many universities as part of degree programs in Applied and Industrial Mathematics. Mathematical Engineering, and Quantitative Finance.