

1. Record Nr.	UNINA9910464771303321
Autore	Gan Guojun <1979->
Titolo	Measure, probability, and mathematical finance : a problem oriented approach // Guojun Gan, Chaoqun Ma, Hong Xie
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2014 ©2014
ISBN	1-118-83198-5 1-118-83757-6
Edizione	[1st edition]
Descrizione fisica	1 online resource (741 p.)
Disciplina	332.01/5195
Soggetti	Finance - Mathematical models Social sciences - Research - Statistical methods Electronic books.
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	MEASURE, PROBABILITY, AND MATHEMATICAL FINANCE: A Problem-Oriented Approach; Copyright; CONTENTS; Preface; Financial Glossary; PART I MEASURE THEORY; 1 Sets and Sequences; 1.1 Basic Concepts and Facts; 1.2 Problems; 1.3 Hints; 1.4 Solutions; 1.5 Bibliographic Notes; 2 MEASURES; 2.1 Basic Concepts and Facts; 2.2 Problems; 2.3 Hints; 2.4 Solutions; 2.5 Bibliographic Notes; 3 EXTENSION OF MEASURES; 3.1 Basic Concepts and Facts; 3.2 Problems; 3.3 Hints; 3.4 Solutions; 3.5 Bibliographic Notes; 4 LEBESGUE-STIELTJES MEASURES; 4.1 Basic Concepts and Facts; 4.2 Problems; 4.3 Hints; 4.4 Solutions 4.5 Bibliographic Notes5 MEASURABLE FUNCTIONS; 5.1 Basic Concepts and Facts; 5.2 Problems; 5.3 Hints; 5.4 Solutions; 5.5 Bibliographic Notes; 6 LEBESGUE INTEGRATION; 6.1 Basic Concepts and Facts; 6.2 Problems; 6.3 Hints; 6.4 Solutions; 6.5 Bibliographic Notes; 7 THE RADON-NIKODYM THEOREM; 7.1 Basic Concepts and Facts; 7.2 Problems; 7.3 Hints; 7.4 Solutions; 7.5 Bibliographic Notes; 8 LP SPACES; 8.1 Basic Concepts and Facts; 8.2 Problems; 8.3 Hints; 8.4 Solutions; 8.5 Bibliographic Notes; 9 CONVERGENCE; 9.1 Basic Concepts and Facts; 9.2 Problems; 9.3 Hints; 9.4 Solutions 9.5 Bibliographic Notes10 PRODUCT MEASURES; 10.1 Basic Concepts

and Facts; 10.2 Problems; 10.3 Hints; 10.4 Solutions; 10.5 Bibliographic Notes; PART II PROBABILITY THEORY; 11 EVENTS AND RANDOM VARIABLES; 11.1 Basic Concepts and Facts; 11.2 Problems; 11.3 Hints; 11.4 Solutions; 11.5 Bibliographic Notes; 12 INDEPENDENCE; 12.1 Basic Concepts and Facts; 12.2 Problems; 12.3 Hints; 12.4 Solutions; 12.5 Bibliographic Notes; 13 EXPECTATION; 13.1 Basic Concepts and Facts; 13.2 Problems; 13.3 Hints; 13.4 Solutions; 13.5 Bibliographic Notes; 14 CONDITIONAL EXPECTATION; 14.1 Basic Concepts and Facts; 14.2 Problems; 14.3 Hints; 14.4 Solutions; 14.5 Bibliographic Notes; 15 INEQUALITIES; 15.1 Basic Concepts and Facts; 15.2 Problems; 15.3 Hints; 15.4 Solutions; 15.5 Bibliographic Notes; 16 LAW OF LARGE NUMBERS; 16.1 Basic Concepts and Facts; 16.2 Problems; 16.3 Hints; 16.4 Solutions; 16.5 Bibliographic Notes; 17 CHARACTERISTIC FUNCTIONS; 17.1 Basic Concepts and Facts; 17.2 Problems; 17.3 Hints; 17.4 Solutions; 17.5 Bibliographic Notes; 18 DISCRETE DISTRIBUTIONS; 18.1 Basic Concepts and Facts; 18.2 Problems; 18.3 Hints; 18.4 Solutions; 18.5 Bibliographic Notes; 19 CONTINUOUS DISTRIBUTIONS; 19.1 Basic Concepts and Facts; 19.2 Problems; 19.3 Hints; 19.4 Solutions; 19.5 Bibliographic Notes; 20 CENTRAL LIMIT THEOREMS; 20.1 Basic Concepts and Facts; 20.2 Problems; 20.3 Hints; 20.4 Solutions; 20.5 Bibliographic Notes; PART III STOCHASTIC PROCESSES; 21 STOCHASTIC PROCESSES; 21.1 Basic Concepts and Facts; 21.2 Problems; 21.3 Hints; 21.4 Solutions; 21.5 Bibliographic Notes; 22 MARTINGALES; 22.1 Basic Concepts and Facts; 22.2 Problems; 22.3 Hints; 22.4 Solutions; 22.5 Bibliographic Notes; 23 STOPPING TIMES; 23.1 Basic Concepts and Facts; 23.2 Problems; 23.3 Hints; 23.4 Solutions; 23.5 Bibliographic Notes

Sommario/riassunto

An introduction to the mathematical theory and financial models developed and used on Wall Street. Providing both a theoretical and practical approach to the underlying mathematical theory behind financial models, Measure, Probability, and Mathematical Finance: A Problem-Oriented Approach presents important concepts and results in measure theory, probability theory, stochastic processes, and stochastic calculus. Measure theory is indispensable to the rigorous development of probability theory and is also necessary to properly address martingale measures, the change of num
