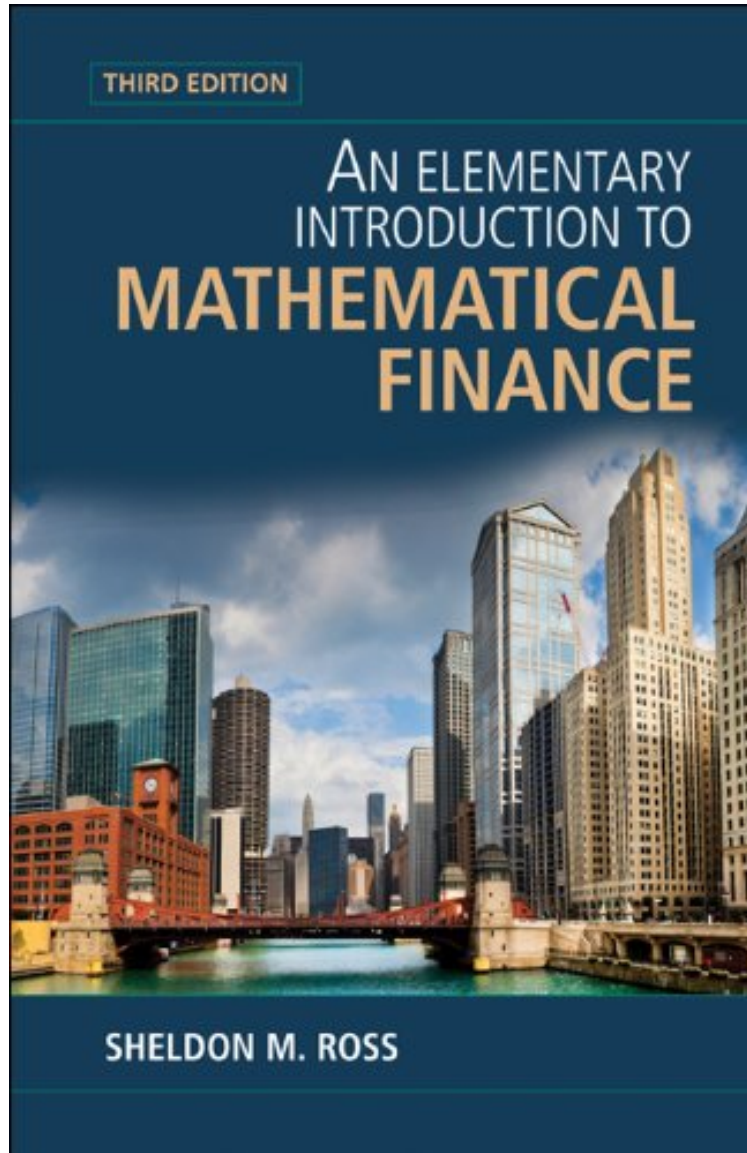


(Read free) An Elementary Introduction to Mathematical Finance

An Elementary Introduction to Mathematical Finance

Sheldon M. Ross

*ePub | *DOC | audiobook | ebooks | Download PDF*



DOWNLOAD



READ ONLINE

#861819 in eBooks 2011-02-28 2013-07-24File Name: B00AKE1Y9W | File size: 76.Mb

Sheldon M. Ross : An Elementary Introduction to Mathematical Finance before purchasing it in order to gage whether or not it would be worth my time, and all praised An Elementary Introduction to Mathematical Finance:

0 of 1 people found the following review helpful. This book is amazing. It helps you to get ready for finance ...By TuralThis book is amazing. It helps you to get ready for finance interviews. I use it all the time.3 of 4 people found the following review helpful. Pros and ConsBy Fang JingNice selection of topics, and interesting and helpful explanation of intuition. I don't like the following two points:1. The book is hand-wavy in a lot of places - which is fine for a book at this level. However, whenever you're waving hands, you should explicitly tell the reading you're doing so, instead of

pretending as if you're following full rigor. For example, in models dealing with Brownian motions, the author presented several "proof" which are actually heuristics of proofs. In the stochastic order chapter, the author often confuses weak monotonicity with strict monotonicity, which I guess he does intentionally to simplify the proofs - but again, he should admit so, instead of fooling the readers.² I don't think the use of risk-neutral probability measure in arbitrage pricing is sufficiently explained, and many readers may get confused by the author's notation of pricing assets just by taking expectations. Of course expectations should be taken, but it is not necessarily with respect to the "actual" probability measure, but the risk-neutral measure. The author should dedicate some space in the book to explain this much more, or reflect the difference in the notations (e.g., using $\mathbb{E}_{\mathbb{P}}$ to denote the expectation w.r.t. the risk-neutral measure as opposed to the actual measure.) Since many readers of this book probably haven't taken a probability theory or measure theory course; in their minds, taking expectations only have the classical sense of finding averages. The presentation in this book may mislead the readers to believe no-arbitrage pricing is just buying and selling at the average payoff, which can't be further away from the truth.

This textbook on the basics of option pricing is accessible to readers with limited mathematical training. It is for both professional traders and undergraduates studying the basics of finance. Assuming no prior knowledge of probability, Sheldon M. Ross offers clear, simple explanations of arbitrage, the Black-Scholes option pricing formula, and other topics such as utility functions, optimal portfolio selections, and the capital assets pricing model. Among the many new features of this third edition are new chapters on Brownian motion and geometric Brownian motion, stochastic order relations and stochastic dynamic programming, along with expanded sets of exercises and references for all the chapters.

'... an excellent introduction to the subject ... the book is ideally suited for self-study and provides a very accessible entry point to this fascinating field.' *ISI Short Book s'*... this excellent text achieves its aim to provide a highly accessible and at the same time accurate presentation of the subject. I would recommend it.' *The Statistician'*... an excellent introduction to the mathematics of finance ... very useful as a text for an introductory course.' *Zentralblatt Math'*... provides an accessible and relatively deep insight into basic and advanced topics of mathematical finance ... The lucid style of the exposition will be appreciated by readers interested in the topic, and by researchers, students, and practitioners.' *European Maths Society Journal* About the Author Sheldon M. Ross is the Epstein Chair Professor at the Department of Industrial and Systems Engineering, University of Southern California. He received his Ph.D. in statistics at Stanford University in 1968 and was formerly a Professor at the University of California, Berkeley, from 1976 until 2004. He has published more than 100 articles and a variety of textbooks in the areas of statistics and applied probability, including *Topics in Finite and Discrete Mathematics* (2000), *Introduction to Probability and Statistics for Engineers and Scientists, Fourth Edition* (2009), *A First Course in Probability, Eighth Edition* (2009), and *Introduction to Probability Models, Tenth Edition* (2009), among others. Dr Ross serves as the editor for *Probability in the Engineering and Informational Sciences*.