Introduction to the mathematics of finance: arbitrage and option pricing

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Abstrak

This book concentrates on discrete derivative pricing models, culminating in a careful and complete derivation of the Black-Scholes option pricing formulas as a limiting case of the Cox-Ross-Rubinstein discrete model. In this edition the material on probability has been condensed into fewer chapters, and the material on the capital asset pricing model has been removed. The mathematics is not watered down, but it is appropriate for the intended audience. Previous knowledge of measure theory is not needed and only a small amount of linear algebra is required. All necessary probability theory is developed throughout the book on a "need-to-know" basis. No background in finance is required, since the book contains a chapter on options.