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5.6 Some Important Results5.7 Systems of Renewal Equations; 5.8 Branching Processes; Problems; Chapter 6 NUMERICAL INVERSION OF THE LAPLACE TRANSFORM; 6.1 Introduction; 6.2 The Complex Laplace Transform; 6.3 Numerical Quadrature; 6.4 The Legendre Polynomials; 6.5 Numerical Inversion of the Laplace Transform; 6.6 Explicit Inversion Formula; 6.7 Instability of the Inverse of the Laplace Transform; 6.8 Tychonov Regularization; 6.9 Obtaining the Initial Approximation; 6.10 Change of the Time Scale; Problems; SUBJECT INDEX

Sommario/riassunto

The classical theory of the Laplace Transform can open many new avenues when viewed from a modern, semi-classical point of view. In this book, the author re-examines the Laplace Transform and presents a study of many of the applications to differential equations, differential-difference equations and the renewal equation.