Contents

Contributors *ix*
Preface *xi*

Some Ideas in Computational Probability 1
Ulf Grenander

Computational Problems Related to the Galton–Watson Process 11
Marcel F. Neuts

Central Limit Analogues for Markov Population Processes 39
Donald R. McNeil and Siegfried Schach

The Stochastic Nature of Pension Costs 71
Arnold F. Shapiro

An Approximation Method to Calculate the Value of a Maturity Guarantee under a Level-Premium Equity-Based Contract 91
Phelim Paul Boyle

Efficient Sorting by Computer: An Introduction 101
Robert Sedgewick

Symbolic Information Processing 131
Kenneth M. Levine and Peter Masters

APL for Actuaries 155
Donald L. Orth

Backward Population Projection by a Generalized Inverse 173
T. N. E. Greville and Nathan Keyfitz

Accounting Principles for Life Insurance: Reflections on Language and Notation 185
Gottfried Berger

Reversionary Annuities as Applied to the Evaluation of Law Amendment Factors 231
Lena Chang

Nonlife Business and Inflation 249
Harald Bohman

Numerical Fourier Inversion 257
Harald Bohman

Some Practical Considerations in Connection with the Calculation of Stop-Loss Premiums 261
Hans U. Gerber and Donald A. Jones

Simulation of a Multirisk Collective Model 287
John A. Beekman and Clinton P. Fuelling

Experimental Computation 303
Richard Vitale

Partitioning for Homogeneity 311
Donald E. McClure

Correlates of Life Insurance Lapsation 325
J. R. Brzezinski

Some Practical Notes about Solving the Lundberg Risk Equation 337
Nils Wikstad