

Contents

Introduction vii

Part I: *Mathematics and the Intellect*

- Mathematics and Thinking Mathematically, *Mary Cartwright* ... 3
 Mathematical Invention, *Henri Poincaré* 17
 Thoughts on the Heuristic Method, *Jacques Hadamard* 31
 Mathematical Proof, *G. H. Hardy* 45
 The Unity of Knowledge, *Hermann Weyl* 65

Part II: *Mathematics and Human Understanding*

- Mathematics and the Arts, *Marston Morse* 81
 Intuition, Reason and Faith in Science, *George David Birkhoff* ... 95
 Logic and the Understanding of Nature, *David Hilbert* 115
 The Cultural Basis of Mathematics, *Raymond Wilder* 129

Part III: *Mathematics and Society*

- Presidential Address to the British Association, *J.J. Sylvester* ... 151
 The Mathematician, *John von Neumann* 169
 The Community of Scholars, *André Lichnerowicz* 185
 History of Mathematics: Why and How, *André Weil* 199

Part IV: *Miscellaneous*

- Does God Exist?, *Paul Lévy* 217
 Goethe and Mathematics, *Wilhelm Maak* 231
 Leonardo and Mathematics, *Francesco Severi* 247
 The Highest Good, *Norbert Wiener* 257

Cambridge University Press
0883855496 - Musings of the Masters: An Anthology of Mathematical Reflections
Edited by Raymond G. Ayoub
Table of Contents
[More information](#)

xvi	Musings of the Masters
Sources of the Articles	271
Index	273