A Century of Mathematics in America

Part II



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Preface

Part I of A Century of Mathematics in America, published for the Centennial celebration of the American Mathematical Society in August 1988, featured a collection of "autobiographically oriented historical articles" by senior American mathematicians. In Part II the emphasis now shifts to histories of mathematical activity at some of the major academic institutions in America: Harvard, Yale, Chicago, Princeton, Stanford, Berkeley, and NYU. The selection of institutions was governed to some extent by the willingness of qualified people to put aside other obligations and produce these historical accounts on relatively short notice. In most cases the primary accounts are supplemented by reprinted articles of recent vintage, and by older materials.

In addition to the articles on mathematical centers, this volume reprints the proceedings of a very unusual conference held at Princeton in 1946 to mark the Bicentennial of the University. The world war had just ended, mathematicians had returned to their university positions, and large numbers of veterans were beginning or resuming graduate work. It was a good time to take stock of open problems and to try to chart the future course of research. Many of the leading mathematicians of the day assembled at Princeton to hold informal discussions on the state of the art in each of nine broad areas of mathematics. Written versions of the discussions were recorded in the proceedings, which unfortunately were not widely circulated at the time. In reading the proceedings today, one cannot fail to see how different mathematics was in 1946, how far matters have progressed over the last forty years. The picture is further clarified by expert commentaries on the Princeton discussions, prepared in 1988 by current leaders in the same fields of research.

The volume concludes with articles describing several aspects of America's mathematical past. Among them are retrospective analyses of political and social currents which have affected the mathematical scene in America, discussions of some major mathematicians and their work, and accounts of the historical development of certain areas of mathematics.

On behalf of the mathematical community, the editors would like to thank the writers for their superb contributions. Their heroic efforts and friendly x PREFACE

spirit of cooperation are most appreciated. The editors are also grateful to Albert Tucker for his enthusiastic moral support of the historical project and for some very good suggestions, including the reprinting of the Princeton proceedings. Once again, the editors want to acknowledge the close participation of Mary Lane, Director of Publication at the AMS, in all of the detailed work which went into the formation of this volume. Finally, a special word of appreciation to Donna Harmon and Michael Saitas for their efficient handling of many administrative details, and to all of the AMS production staff, whose expertise will be readily apparent.

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