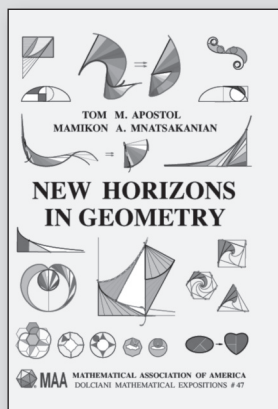


New

From the

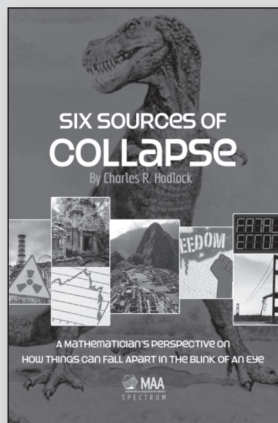


Mathematical Association of America



Catalog Code:
DOL-47

520 pp., Hardbound, 2013
978-0-88385-354-2
List: \$75.00
MAA Member: \$60.00



Catalog Code:
SSC

296 pp., Hardbound, 2012
ISBN 978-0-88385-579-9
List: \$50.00
MAA Member: \$40.00

New Horizons in Geometry

By Tom M. Apostol & Mamikon A. Mnatsakanian

In a remarkable display of mathematical versatility and imagination, the authors present us with a wealth of geometrical gems. These beautiful and often surprising results deal with a multitude of geometric forms, their interrelationships, and in many cases, their connection with patterns underlying the laws of nature.

—Don Chakerian

N*ew Horizons in Geometry* represents the fruits of 15 years of work in geometry by a remarkable team of prize-winning authors—Tom Apostol and Mamikon Mnatsakanian. It serves as a capstone to an amazing collaboration. Apostol and Mamikon provide fresh and powerful insights into geometry that requires only a modest background in mathematics. Using new and intuitively rich methods, they give beautifully illustrated proofs of results, the majority of which are new, and frequently develop extensions of familiar theorems that are often surprising and sometimes astounding. It is mathematical exposition of the highest order. The hundreds of full color illustrations by Mamikon are visually enticing and provide great motivation to read further and savor the wonderful results. Lengths, areas, and volumes of curves, surfaces, and solids are explored from a visually captivating perspective. It is an understatement to say that Apostol and Mamikon have breathed new life into geometry.

Six Sources of Collapse

Charles Hadlock

Six Sources of Collapse is a wonderful book in numerous ways. Chance, group behavior, evolutionary processes, instability, nonlinearity, and networks are adroitly brought under the same roof and applied to a stunning range of important examples, from the collapse of ancient civilizations to the collapse of financial markets. Lucid engaging primers in relevant areas of mathematics—including non-linear differential equations, network theory, and extreme value statistics—are presented with an unpretentious informality attainable only by those with the deepest command. In effect, Hadlock offers both the call to arms and the armamentarium for a unified theory of collapse. An important scientific and pedagogical contribution.

—Professor Joshua M. Epstein

Director of the Center for Advanced Modeling in the Social, Behavioral, and Health Sciences, Johns Hopkins University, and External Professor, Santa Fe Institute

Beginning with one of the most remarkable ecological collapses of recent time, that of the passenger pigeon, Hadlock goes on to survey collapse processes across the entire spectrum of the natural and man-made world. He takes us through extreme weather events, technological disasters, evolutionary processes, crashing markets and companies, the chaotic nature of Earth's orbit, revolutionary political change, the spread and elimination of disease, and many other fascinating cases. His key thesis is that one or more of six fundamental dynamics consistently show up across this wide range. These "six sources of collapse" can all be best described and investigated using fundamental mathematical concepts. They include low probability events, group dynamics, evolutionary games, instability, nonlinearity, and network effects, all of which are explained in readily understandable terms.

To order call 1-800-331-1622

or online at: <http://maa-store.hostedbywebstore.com/>