Book Review: Problem-Solving and Selected Topics in Euclidean Geometry: In the Spirit of the Mathematical Olympiads.

Foreword by Michael H. Freedman
Authors: Sotirios E. Louridas and Michael Th. Rassias
Publisher: Springer, New York, 2013, x+235 pages.

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There are many excellent books on plane Euclidean geometry, exploring the subject at various levels. The book under review, which is foreworded by Michael H. Freedman (Fields Medal, 1986), adds yet another facet to this colorful subject. This delightful book presents a collection of problems in plane Euclidean geometry in the spirit of mathematical olympiads, along with their solutions. Additionally, it provides essential theory of plane Euclidean geometry, with proofs of some fundamental theorems. As such, this monograph is an excellent training manual to use in preparation for mathematical competitions and olympiads. Hence, this is a book that belongs in all academic libraries, from high school through graduate level.

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About the Author. Euclidean Geometry in Mathematical Olympiads. With 248 Illustrations. c 2016 by The Mathematical Association of America (Incorporated).

Problem Books is a series of the Mathematical Association of America consisting of collections of problems and solutions from annual mathematical competitions; compilations of problems (including unsolved problems) specific to particular branches of mathematics; books on the art and practice of problem solving, etc. Aha! Solutions, Martin Erickson The Alberta High School Math Competitions 1957–2006: A Canadian Problem Book Hence this book is centered heavily around solving problems, making it especially suitable for students preparing for national or international olympiads. Michael Th. Rassias. Problem-Solving and Selected Topics in Euclidean Geometry. In the Spirit of the Mathematical Olympiads. Foreword by Michael H. Freedman. Sotirios E. Louridas Athens, Greece. We feel deeply honored and grateful to Professor Michael H. Freedman, who has written the Foreword of the book. We would like to express our thanks to Professors D. Andrica, M. Bencze, S. Markatis, and N. Minulete for reading the manuscript and providing valuable suggestions and comments which have helped to improve the presentation of the book. We would also like to thank Dr. A. Magkos for his useful remarks. Problem-solving is an activity of solving problems; the skill of problem-solving is the ability to approach solving problems in a systematic manner. The skill - either innate or acquired - may fade unless exercised. Sotirios E. Louridas and Michael Th. Rassias, the authors of the book at hand, put together an excellent collection of problems to practice, and detailed solutions to follow the masters exposing that skill. If the title of the book is any indication, they set out to achieve more - probably, to instruct in problem-solving, or, at least, outline their problem-solving methodology. The... The first is a trifling matter: I have not found a problem in the book that is solved with the mathematical induction. Why is it mentioned?