The Problem Section

Michael W. Ecker, PhD, Problem Section Editor
Stephen Plett, Solutions Editor
Albert Natian, Solutions Editor

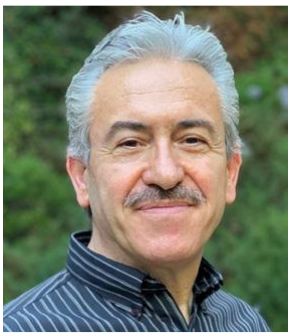
Our Purpose and Interest. The problem section seeks lively and interesting mathematics problems and their solutions. The typical problem might entail one hour to one month to solve. Technology may supplement a problem solution but should never supplant it. A good problem will stretch your knowledge to go beyond your textbook, routine, and comfort zone. A very good problem may have some generalization, special case, or nice extension into another area. It might afford a novel solution beyond mere formulaic chug-and-plug. Quickies and our NEW Super-Quickies are shorter, easier problems that do not quite make the cut because they can be handled more quickly. Their solutions appear in the same issue just before the solutions to earlier problems. If you have one to share, or believe you have a better solution to one in here, please send it. If we agree, we may publish it in a future issue.

How to Submit Material. To propose a problem or offer a solution, prepare it as a Microsoft Word file, preferably saved in the older .doc format. Use Math Type or Equation Editor as needed for layout, and include needed graphs or drawings within your document. Note: If you use a non-Word format, such as pdf, or handwriting, or fail to properly display mathematical expressions, you increase the amount of work we must do and thereby decrease the likelihood of your submission getting published in a timely fashion. Send new proposals to the Problem Section Editor at DrMWEcker@aol.com along with your name, institutional affiliation, and city/state. Electronic submissions are strongly preferred, but if you need to use mail, please send items to Mike Ecker/ Problems Editor, *MathAMATYC Educator*/ 1 Hamilton Road/ Dallas, PA 18612.

Please send all proposed solutions by email to the solutions editor, Steve Plett, at Prof.S.Plett@gmail.com, but please include a copy for the problems editor, Mike Ecker, at DrMWEcker@aol.com. Steve and I will commit that *all problems and solutions offered by e-mail will be acknowledged immediately via e-mail by the respective editor*, and *all published proposals and timely correct solutions will be fully and properly credited to their authors*.

Michael W. Ecker had a 45-year career as a mathematics professor, most of it at Pennsylvania State University's Wilkes–Barre campus. He retired from teaching in 2016. His PhD in mathematics was from City University of New York (1978). Published 500+ times as a mathematician or computer journalist, Mike also served on national committees responsible for creating competitive national exams, and was the founding Problem Section Editor of The AMATYC Review (1981–1997). As a recreational mathematician, he published his own newsletter, Recreational & Educational Computing (1986–2007). He remains an avid technology enthusiast, currently owning over 125 computers.

Stephen Plett retired in 2020 after 40 years as a mathematics professor, most of which was at Fullerton College. He holds two master's degrees: applied mathematics from the University of California, Riverside (1980) and mathematics for collegiate teaching from California State University, Fullerton (1988). Steve has authored introductory textbooks in differential equations and linear algebra, a few journal articles, and has contributed to publications in problem solving for 35 years, including being Solutions Editor of The AMATYC Review for Mike and his successor as Problem Section Editor (1997–2008).



Albert Natian has been a professor of mathematics at Los Angeles Valley College for over 30 years. A collector of sorts, he holds master's degrees in pure math, applied math, mathematical finance, and physics. His interests include combinatorics, applied probability, classical and modern physics, and philosophy. Albert enjoys mathematical puzzles, especially those involving probability. In his downtime, he does conceptual pen and ink drawings that involve patterns and objects in novel spatial relationships.