

The Problem Section

Michael W. Ecker, PhD, Problem Section Editor

Bryan Wilson, 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. Quicker Problems and our NEW Students' Quicker Challenges 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 printed, 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 and all solutions 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 Dr. Michael Ecker/ Problems Editor, *MathAMATYC Educator*/ 1 Hamilton Road/ Dallas, PA 18612.



Michael W. Ecker had a 45-year career as a mathematics professor, retiring from Penn State University's Wilkes-Barre campus in 2016. With a PhD in mathematics from the City University of New York (1978), he has been published 500+ times as a mathematician or computer journalist. Mike also served on the national committees responsible for creating the MAA's 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 (REC)*, (1986-2007). For free PDF copies of *REC*, visit <https://dr-michael-ecker.weebly.com>.



Bryan Wilson is an Associate Professor at Salt Lake Community College and has been teaching there since 2015. He holds a master's degree in mathematics from the University of Utah (2015). He has extensive experience in math competitions, including being a multiple-year Idaho state champion in high school and placing in the top 200 nationally in the 2006 Putnam Exam. In his free time, Bryan enjoys coding challenges such as his college sports ranking algorithm and programming bots to play various board and card games.