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Visualizing series.

Math. Teach. Inc. Micromath 2008, No. 208, 10-12 (2008).

Summary: The importance of visualisation and multiple representations in mathematics has been stressed, especially in a context of problem solving. Hanna and Sidoli comment that "Diagrams and other visual representations have long been welcomed as heuristic accompaniments to proof, where they not only facilitate the understanding of theorems and their proofs, but can often inspire the proof of the theorem, and point out approaches to the construction of the proof itself". Apostol, a teacher of calculus for more than 50 years and author of a couple of textbooks on the subject, in his seminal article titled "A visual approach to calculus problems", points out that he "was stunned to learn that many standard problems in calculus can be easily solved by an innovative visual approach that makes no use of formulas". In this article, the author describes some different ways of visualising the sum of a series. (Contains 1 table.) (ERIC)

Classification: H20 E50

Keywords: mathematical formulas; finite series; calculus; teaching methods; visualization