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Beautiful mathematics.

MAA Spectrum. Washington, DC: The Mathematical Association of America (MAA) (ISBN 978-0-88385-576-8/hbk). xiii, 177 p. (2011).

“Beautiful Mathematics” is a collection of about 100 elementary problems that are examples of beauty in mathematics (let me mention the classical book by *H. Dörrie* [100 great problems of elementary mathematics. Their history and solution. New York: Dover Publications (1965; Zbl 0496.00001)] which is similar in spirit). While some of them (like 1.2.: “What is a centillion?”) have problems in conveying beauty, and others are the usual suspects that should have been rounded up 70 years ago (Golden Ratio, Euler’s polyhedral formula), there are enough gems to be found in this book that make it a pleasure to read for everyone with a solid background in high school mathematics. Among the problems that I liked best is the first one on the parametrization of the lemniscate by interpreting it as the circular inverse of a hyperbola (1.1), the determinant of the matrix formed by two vectors as the area of the parallelogram spanned by these vectors (1.9), or the connection between Lucas’ problem of pyramidal squares and the Leech lattice (2.1). I am certain that there is something in this book for any reader, and I strongly recommend it to everyone interested in mathematics.

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Classification: A80 F60 K30

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