

ZMATH 2015f.00990

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Mathematics competition questions: their pedagogical values and an alternative approach of classification.

Cho, Sung Je (ed.), Selected regular lectures from the 12th international congress on mathematical education, ICME 12, Seoul, Korea, July 8–15, 2012. Cham: Springer (ISBN 978-3-319-17186-9/hbk; 978-3-319-17187-6/ebook). 807-819 (2015).

Summary: In this paper, it is argued that the role of the various mathematics competitions could be expanded beyond helping the nation in identifying and developing the mathematically gifted students. Through an examination of some mathematics competition questions, it was identified that these competition questions could serve to help the general student population to (1) acquire mathematical problem solving processes through engaging in or developing a problem solving model; (2) learn mathematics beyond the constraint of the school mathematics curriculum; (3) deepen students' understanding of school mathematics; and (4) acquire mathematical techniques rendered obsolete by evolving technology. With the availability of vast resources on competition questions, an alternative approach to classifying competition questions based on the functions they could serve in the usual mathematics classroom is proposed.

Classification: U40 D50 B60 C40

Keywords: mathematics competition; problem solving; classification

doi:10.1007/978-3-319-17187-6_45