

ZMATH 2009e.00333

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Visualisation and proof: a brief survey of philosophical perspectives.

ZDM, Int. J. Math. Educ. 39, No. 1-2, 73-78 (2007).

Summary: The contribution of visualisation to mathematics and to mathematics education raises a number of questions of an epistemological nature. This paper is a brief survey of the ways in which visualisation is discussed in the literature on the philosophy of mathematics. The survey is not exhaustive, but pays special attention to the ways in which visualisation is thought to be useful to some aspects of mathematical proof, in particular the ones connected with explanation and justification.

Classification: E50 E20

Keywords: proving; visualization; explanation; justification; mathematics and philosophy

doi:10.1007/s11858-006-0005-0