

1018-01-56

Hardy Grant* (hardygrant@yahoo.com), 5010 Opeongo Road, P.O. Box 165, R.R. 3, Woodlawn, ON K0A 3M0, Canada. *Greek mathematics and Greek skepticism*. Preliminary report.

"Skepticism", dating from Pyrrho (c. 300 B.C.) and connoting something similar to, if not quite identical with, our use of the term, became a considerable presence in Hellenistic philosophy. On the face of things the apparent certainty of mathematics would seem a particular challenge to the systematic doubting and suspension of judgment that characterize the Sceptics' stance, and indeed our leading source for the movement, Sextus Empiricus (c. 200 A.D.), offers substantial critiques of both arithmetic and geometry. The latter is the more interesting: it tends to attack the coherence, indeed the very conceivability, of fundamental geometrical notions. I shall try to describe and evaluate these criticisms and to assess their impact on contemporary mathematical practice. (Received February 20, 2006)