1023-N1-882 Carl E. Behrens* (cbehrens@crs.loc.gov), 5107 Cedar Rd., Alexandria, VA 22309. Why do we all get the same answers? Kitcher's anti-apriorism and the problems of social constructivism.

Philip Kitcher's 1983 study, The Nature of Mathematical Knowledge, challenged the widely held principle that mathematical laws and methods are true a priori. Instead, he argued, they are developed in evolutionary fashion by mathematicians building on the work of previous generations. But if mathematics is constructed by human beings, why do they all agree on the results? Physical constants, such as gravity or the charge on the electron, are determined by observing the behavior of the external physical world, but mathematics is primarily, or completely, the product of the human mind. If mathematical laws and methods are not true a priori, why do all human minds produce the same answers? An empiricist response to this question will be discussed. (Received September 22, 2006)