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Katalin Bimbó* (bimbo@ualberta.ca), 2–40 Assiniboia Hall, Department of Philosophy,
University of Alberta, Edmonton, Alberta T6G2E7, Canada. *The unexpected usefulness of
epistemological skepticism.*

David Hilbert believed that mathematical problems have definite answers. Some philosophers of mathematics concentrate on metaphysical questions such as “Do numbers (or sets, triangles, etc.) exist?” However, epistemological problems are probably more important for mathematical practice than taking a stance in an ontological debate. I will illustrate that moderate skepticism can help us to produce a definite answer to a precisely formulated mathematical problem. The example comes from theoretical computer science, which I take here to be a (relatively) new branch of mathematics. Objects in theoretical computer science are often more structured and complicated than an equilateral triangle, but at the same time, they are more abstract than an app or an OS. Occasionally, our intuitions come up short in reasoning about these kinds of objects. I will conclude that a certain skepticism together with insistence on more formal definitions and proofs can be fruitful. (Received September 18, 2016)