1023-11-115 **Jonathan Sondow*** (jsondow@alumni.princeton.edu), 209 West 97th Street, New York, NY 10025. *Which Partial Sums of the Taylor Series for e Are Convergents to e? (with an Appendix by Kyle Schalm).*

In a paper in the August 2006 Monthly, we made the computation-based conjecture that 2 and 8/3 are the only partial sums of the Taylor series for e which are convergents to the simple continued fraction expansion of e. In the present paper, we prove some partial results toward this conjecture, using calculation of the first 16 convergents. In particular, we show that almost all of the partial sums are not convergents to e. In an appendix, K. Schalm gives a conditional proof of the conjecture, assuming a certain other conjecture about periodic behavior of the denominators of the convergents to e modulo powers of 2, for which he presents experimental evidence. (Received August 01, 2006)