1014-11-1281Jonathan Sondow* (jsondow@alumni.princeton.edu), 209 West 97th Street, New York, NY10025. A New Generalization of the Woods-Robbins Infinite Product to Base B.

The Woods-Robbins infinite product has as exponents the ± 1 Prouhet-Thue-Morse binary sequence. We give a new generalization of the product to base B. The proof is based on an elegant derivation of the Woods-Robbins formula discovered by J.-P. Allouche. We discuss a further generalization obtained jointly with Allouche. (Received September 28, 2005)