R. S. Melham

12 Two-Parameter Families of Reciprocal Sums of Products of the Sine and Cosine Functions,

Abstract

In this paper, we give closed forms for 12 two-parameter families of finite sums. In each of the aforementioned 12 families of finite sums, the denominator of the summand consists of a product of the sine or cosine functions, and the length of this product can be made as large as we please.