1092-45-314Dominic Lanphier* (dominic.lanphier@wku.edu), Department of Mathematics, Western
Kentucky University, Bowling Green, KY 42101. An integral formula for the Taylor coefficients of
products of functions and applications to orthogonal polynomials.

We give an integral formula which can be interpreted either as a formula for the Taylor coefficients of a product of holomorphic functions or as an interpolation-type formula. The main ingredients in the proof are Fourier analysis and Ramanujan's Master Theorem. We then give applications to several orthogonal polynomials. (Received August 12, 2013)