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Karen T. Kohl* (karen.kohl@usm.edu), Department of Mathematics, University of Southern Mississippi, Long Beach, MS 39560. *Recurrences for integrals of special functions*. Preliminary report.

The method of brackets is an experimental method for symbolic evaluation of definite integrals, including many involving special functions. We show how to study output in the form of multi-sum series using recurrence-finding algorithms, producing verifiable summation identities in the process. Additionally, the recurrences hold for the integrals themselves, allowing us to extend classes of integrals. (Received January 19, 2016)