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Luke Cherveny* (cherveny@math.ucla.edu), UCLA Mathematics Dept, Box 951555, Los Angeles, CA 90095. A Mirror Principle Approach To Calculating Genus Zero Gromov-Witten Invariants With One Or Two Primary Field Insertions.

We calculate genus 0 Gromov-Witten invariants in the case of one or two inserted primary fields by studying a generalization of Euler data. This constitutes a complete extension of the Lian-Liu-Yau Mirror Principle program to the case of one and two marked points, allowing certain series of multiplicative equivariant Euler classes twisted by the pullbacks of equivariant classes on P^n to be expressed in terms of hypergeometric series. The methods yield a simple proof of the multiple covering formula and often lead to closed formulas for Gromov-Witten invariants for local Calabi-Yau manifolds. More generally, the procedure holds in full for concavex bundles and may be exploited in some instances to calculate Gromov-Witten invariants with descendents as well. (Received September 15, 2009)