

1096-VB-2200 **Michael A. Jones*** (maj@ams.org), Mathematical Reviews, Ann Arbor, MI 48103, and **Jennifer Wilson** (wilsonj@newschool.edu), Eugene Lang College, The New School for Liberal Arts, New York, NY 10011. *Adjusting Child Support Payments in Michigan.*

Michigan uses an unusual formula in the calculation of child support payments. For divorced parents A and B in Michigan, the base monetary support each parent is expected to contribute to raising their child is adjusted according to the number of (over)night spent with the parents. Curiously, this adjustment is based on a rational polynomial function parameterized by k that describes the amount of money that A must pay B , where B must pay A if the result is negative. In the 2004 Michigan Child Support Formula Manual, $k = 2$, meaning the polynomials are quadratic; while $k = 3$ (for cubic polynomials) in both the 2008 and 2013 editions. In this talk, we use calculus to examine this function, explain the effect of changing k , and point out an alternative form that stretches and translates a simpler function. (Received September 17, 2013)