(Me) vs (Them) with the Help of Mr. Lincoln.

Two payment schedules for a loan with the same: number of payments, principal, Annual Percentage Rate (APR) and monthly payments except the principal to interest ratios are different, differ on completion of the number of payment. One schedule shows deficiency in the amount of principal paid balanced by the excess interest paid. The other has the principal paid and any further interest to be zero. Then combining the two schedules, the principal is now overpaid on one by one cent less than the interest owed on the other. This result is achieved linearly, leaving the question as to how to compute the initial assumption of overpaid interest from the two schedules? To this end a nonlinear function is derived whose properties over a large range appear linear. Now the exact overpayment of interest is computed from the two schedules. From this, we conclude either both schedules are correct which cannot be or both are incorrect which shows that in any case, the principal is not owed. (Received August 25, 2011)