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**Leonid Makar-Limanov\*** (lml@math.wayne.edu). *A property of a Jacobian mate.*

A polynomial  $f \in C[x, y]$  is called a Jacobian mate if there exists a polynomial  $g \in C[x, y]$  such that the Jacobian  $J(f, g) = 1$ .

Newton's procedure can be applied to solve an equation  $f(x, y) = 0$  and present  $y$  as an infinite power series in fractional powers of  $x$ , either by decreasing or increasing powers. In the process the Newton polygon is attached to a solution. It turns out that though a priori polygons which correspond to different solutions may be different, the Newton polygons attached to different solutions by decreasing powers are the same.

This observation sheds additional light on the Jacobian conjecture. (Received September 14, 2010)