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Elifalet López* (elgonzal@uacj.mx), General Monterde 433 interior 2, Partido Escobedo, 32330 Ciudad Juárez, Chihuahua, Mexico. *ALGEBRIZATION OF ORDINARY DIFFERENTIAL EQUATIONS.*

Given a vector field defined in an open subset of the n -dimensional Euclidian space, in this work the question is asked whether there exists a product such that the space can be an algebra and the vector field can be a differentiable map in the Lorch sense. When this is possible, the system can be expressed as a “differential equation of one variable over the algebra” which could be solved by the known methods for solving ordinary differential equations. In this way the solution of the system is obtained. (Received February 22, 2010)