Nasser Dastrange* (dastrange@bvu.edu), Buena Vista University, 610, West Fourth Street, Storm Lake, IA 50588. On the Mean Value Theorems for Functions of Two Variables. Preliminary report.

Lagrange's mean value theorem for functions of one variable can be extended to functions of two variables. In this talk we will prove the mean value theorems for functions of two variables and related functional equations. Furthermore, we will discuss Cauchy's mean value theorem for functions of two variables. (Received September 17, 2007)