1046-26-654   **Nasser Dastrange*** (`dastrange@bvu.edu`), Buena Vista University, 610, W. 4th. St., Storm Lake, IA 50588. *A generalization of the mean value theorem for integrals.* Preliminary report.

An important theorem in calculus is the integral mean value theorem. In this talk we introduce a generalization of this theorem. Furthermore, we investigate the nature of the integral representations of some well known means such as arithmetic, geometric, and logarithmic.

Additionally, some interesting properties, examples, geometrical illustrations, and recent research on the integral mean value theorem will be presented. (Received September 09, 2008)