1096-L1-2705 **Joanna Mamona-Downs*** (mamona@upatras.gr), 323 E Veterans Way, Tempe, AZ 85281. *On the reconciliation of different non-equivalent definitions designed for the same concept, in the context of limits for two-variable functions.*

Two definitions are considered for the limit at a point P of a function mapping (a subset of) the real plane into the real numbers. For the first, convergence at P is determined by establishing that for any real interval centred at the proposed limit, a disc centred at P (lacking P) is mapped into that interval. For the second, convergence at the point P is determined by the existence and consistency of the limits at P over all half-lines emanating from P. Educational issues that arise are: Geometric interpretation of the limiting processes; parameterization (to utilize the definition of a limit for the one-variable case); grounds to prefer one definition over another; what it does mean for definitions to be equivalent; would students consider and determine that the two definitions above are not equivalent? I will present a teaching sequence guiding students to adapt the second definition to become equivalent to the first. For this, the notion of the 'greatest' $\delta$ given a particular $\epsilon$ for 1-variable functions is required; this notion is modeled in terms of sets as the 'greatest' $\delta$ may not exist (so suprema come in). (Received September 18, 2013)