

1116-VW-361 **Bryan Dawson*** (bdawson@uu.edu), Union University, Jackson, TN. *Infinitesimals, Point Nine Repeating, and One.*

Many students do not believe that $\bar{9} = 1$, even after seeing a proof. It has been conjectured that for some students the reason lies in their intuition about the infinitely small, that they perceive an infinitesimal difference between the two numbers. Does such a difference actually exist? This presentation explores the question of whether or not $\bar{9}$ and 1 are equal in the hyperreal numbers. (Received August 27, 2015)