1138-60-376 **Santanu Chakraborty*** (santanu.chakraborty@utrgv.edu), School of Math. and Stat. Sciences, University of Texas Rio Grande Valley, 1201 West University Drive, Edinburg, TX 78539, **Mrinal Kanti Roychowdhury** (mrinal.roychowdhury@utrgv.edu), School of Math. and Stat. Sciences, University of Texas Rio Grande Valley, 1201 West University Drive, Edinburg, TX 78539, and **Josef Sifuentes** (josef.sifuentes@utrgv.edu), School of Math. and Stat. Sciences, University of Texas Rio Grande Valley, 1201 West University Drive, Edinburg, TX 78539. *HIGH PRECISION NUMERICAL COMPUTATION OF PRINCIPAL POINTS FOR UNIVARIATE DISTRIBUTIONS.*

Principal points were first introduced by Flury: for a positive integer n, n principal points of a random variable are the n points that minimize the mean squared distance between the random variable and the nearest of the n points. In this paper, we determine the n principal points and the corresponding values of mean squared distance for different values of n for some univariate absolutely continuous distributions. (Received February 13, 2018)