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CLT: An Interactive Approach for Illustrating the Central Limit Theorem

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Title:	**CLT: AN INTERACTIVE APPROACH FOR ILLUSTRATING THE CENTRAL LIMIT THEOREM**
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Abstract:	In classical statistics, inferences about the popula- tion mean, confidence intervals, or testing of hypoth- eses are based on the sampling distribution of X. For the statistician or the mathematically sophisticated, there is little difficulty in proving the central limit theorem (CLT), namely, that the distribution of X can be approximated with a normal distribution whose mean is /ct and whose variance is -2/1n, as /? -> o. The majority of persons are unable to follow the proof, however, and most cannot understand what the CLT is or how it is used in classical statistics. This case is particularly true with students, even those students with strong mathematical backgrounds.